### TITLE V PERMIT COMMENT ADDENDUM

Engineer: René Toledo
Company Name: NEO Yolo LLC
Permit Number: F-01348-1
Date: April27, 2011

#### I. Purpose:

The purpose of this addendum is to address comments made after the Authority to Construct (ATC) was issued, and document any resulting changes made to the Statement of Basis and proposed Title V permit upon their issuance.

## II. Company Comments (dated April 7, 2010):

In a letter dated April 7, 2010, Mr. Anthony Falbo, Vice President and General Manager of Fortistar Methane Group (NEO Yolo LLC), submitted written comments concerning ATC C-09-91 which was issued on March 29, 2010. His comments and the District's responses are summarized below.

#### Comment 1:

NEO Yolo does not agree to the District's inclusion of a specific gas collection limit (in MMSCF) in addition to the heat input limits of the flare (in MMBTU flared). NEO Yolo believes that the site will remain in compliance with the permitted emission limits (in lbs/MMBTU) of the flare regardless of the amount of gas collected by the system. NEO Yolo therefore requests that the gas collection limit be removed from the permit, and only the flare combustion limit be retained.

#### Response 1:

The District does not agree with the comment and will not amend the permitted process limit. The collection system's current Permit to Operate P-26-98(t1), as well as this ATC C-09-91, is for the "negative pressure landfill gas collection system.."., not just the flare. The landfill gas collected by the equipment operating under this permit is routed to, and combusted by, either the MM Yolo permitted engines or the flare listed as control equipment for this permit.

Even though the current permit's Permitted Process Limit was previously calculated based on the heat input rating of the flare, the limit was stated as "Landfill Gas" and doesn't clarify whether this meant flared, or collected.

When the District first went to public notice, the District made the same erroneous assumption as NEO Yolo and processed this modification as if the limit was just for the amount of gas flared. Based on that evaluation, because the historical amount of gas flared was not at 80% in any year in the previous five, the modification triggered offsets for all pollutants.

Based on NEO Yolo's previous comments (received on October 20, 2009 where they objected to the need to provide offsets), the District reconsidered the basis of the permit and re-evaluated the modification using what we believe to be the correct interpretation that this permit is for the overall gas collection system. This re-evaluation resulted in the modification only triggering offsets for  $SO_X$ . This seemed appropriate since the request in the modification was to increase the influent hydrogen sulfide ( $H_2S$ ) concentration, and therefore the District issued the ATC as such.

To avoid any confusion, the ATC's permitted process limits were spelled out more clearly - specifying both a limit on the amount of gas collected (in million cubic feet) and a limit on the amount of gas flared (in million BTUs). In addition, the ATC requires the Permit Holder to track the total landfill gas collected as well as the gas combusted in the flare. This information is essential for determining the "normal operating" conditions of the collection system as well as calculating historical actual emissions for emissions inventory purposes.

#### Comment 2:

NEO Yolo requests that the make and model numbers of the collection system's current blower be removed from the permit in order to allow for the "like" replacement of the unit if it ever fails.

#### Response 2:

The District agrees with the comment and will issue a revised ATC C-09-91 with an amended Equipment Inventory in order to only list the maximum blower rating of 1,897 SCFM. If the existing blower fails, then the District will require that the source replace the unit with a like unit of the same maximum rating. If the replacement unit is determined to be of a different rating (as documented by the manufacturer or through testing), then the District will require that the permit be modified.

ATC Condition 14 (previously Condition 9) will be amended to read:

"14. All landfill gas gathered by this gas collection system shall be collected using only an approved blower with a maximum rating of 1,897 SCFM. [District Rule 3.4]"

ATC Condition 29(a) (previously Condition 25(a)) will be amended to read:

"(a) Measured amount of landfill gas collected by the system's collection blower (in standard cubic feet);"

#### Comment 3:

NEO Yolo requests that the SIC Code of the gas collection system be amended from "4911" (for Electric Services) to "4953" (Refuse System).

#### Response 3:

The District agrees and will amend the SIC Code of the gas collection system to read "4953" (Refuse System). It should be noted that the SIC Code of the collection system's current PTO P-26-98(t1) is "4911".

The SIC Code is used to determine the "stationary source" for New Source Review (NSR) purposes. Stationary source is defined as all emissions units which belong to the same industrial grouping (SIC code), are located on one property (or two or more contiguous properties), and are under the same or common ownership, operation, or control.

The District processed this modification with NEO Yolo and MM Yolo being a single stationary source, and Yolo County Central Landfill (YCCL) being a separate stationary source. However, based on all three of these companies equipment being located on the same (or contiguous) parcels, all three of these companies being under the same industrial grouping (2 digit SIC Code of 49), and uncertainty about common operation, or control, the District has previously requested (on July 24, 2008) a determination from U.S. EPA, Region IX.

As explained by Mr. Falbo in a letter dated May 4, 2010, MM Yolo and NEO Yolo are independent companies that are commonly operated on a day-to-day basis by staff provided by "Fortistar Services LLC". Where the District is uncertain is whether YCCL can be considered under separate control. Since YCCL contracts out the gas collection and energy generation (from the gas generated by their facility - see YCCL Joint Technical Document, July 2007 - Page 20) and absent contracting it out, YCCL would need to operate the collection system and do something with the gas, it would seem that all three entities could be considered under common control. Otherwise, contracting out parts of operations would seem to be a simple way to circumvent aggregating provisions of NSR.

#### Comment 4:

NEO Yolo questions the reason the District (in ATC Condition 11) is requiring daily measurement of gas quality.

#### Response 4:

Condition 11 requires the Permit Holder to measure gas quantity, not quality.

#### Comment 5(a):

NEO Yolo questions the District's methodology used in evaluating this permit modification. Specifically, NEO Yolo believes that because the flare is backup (to the engines operated by MM Yolo) equipment, that the Potential to Emit (PTE) should not be based on the capacity of the flare, but of the overall system. In addition, NEO Yolo is asking for the District to implement a "cap" between the flare and engines, because the landfill gas can only physically be burned in one or the other. NEO Yolo states that when the total amount of landfill gas is burned in either the flare or the engines, that the total emissions (even with the increased  $H_2S$  concentration) do not exceed the District's offset thresholds for  $SO_X$ .

#### Response 5(a):

The term PTE is a District term specific to a permit unit, not a group of permit units. For each District PTO, the District calculates a PTE which is the maximum emissions which could come from an emissions unit. For this permit (for the landfill gas collection system served by the flare), the PTE would be calculated assuming that all of the gas which could be collected by this system (using the rating of the blower) were burned in the flare.

A related concept is facility New Source Review (NSR) balance, which evaluates the total emissions from a "stationary source". This calculated value is used to determine whether a stationary source exceeds the offset thresholds. District rules and regulations do allow a facility to implement an emissions cap, such that the combined emissions from multiple permit units are limited to something less than the sum of the individual permit limits. In order to enforce that, the District usually requires each permit involved to accept conditions which enforce that limit and when one permit is modified, all permits must be modified. In this case, because the cap is created by a physical limitation of how much gas can be collected, the District will allow NEO Yolo to accept a cap, without requiring the identical cap on all five (5) MM Yolo permits (until the next time that MM Yolo modifies each of their permits).

The following conditions will be added to the ATC as Conditions 4 - 9:

- "4. The combined VOC emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 114.6 lb per day, 10,325 lb/1<sup>st</sup> calendar quarter, 10,440 lb/2<sup>nd</sup> calendar quarter, 10,554 lb/3<sup>rd</sup> calendar quarter, 10,554 lb/4<sup>th</sup> calendar quarter, and 20.94 tons per year. [District Rule 3.4]
- 5. The combined CO emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 844.2 lb per day, 75,980 lb/1<sup>st</sup> calendar quarter, 76,825 lb/2<sup>nd</sup> calendar quarter, 77,669 lb/3<sup>rd</sup> calendar quarter, 77,669 lb/4<sup>th</sup> calendar quarter, and 154.07 tons per year. [District Rule 3.4]
- 6. The combined  $NO_X$  emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 234.5 lb per day, 21,106 lb/1<sup>st</sup> calendar quarter, 21,341 lb/2<sup>nd</sup> calendar quarter, 21,575 lb/3<sup>rd</sup> calendar quarter, 21,575 lb/4<sup>th</sup> calendar quarter, and 42.80 tons per year. [District Rule 3.4]
- 7. The combined  $SO_X$  emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 126.0 lb per day, 11,346 lb/1<sup>st</sup> calendar quarter, 11,472 lb/2<sup>nd</sup> calendar quarter, 11,598 lb/3<sup>rd</sup> calendar quarter, 11,598 lb/4<sup>th</sup> calendar quarter, and 23.01 tons per year. [District Rule 3.4]

- 8. The combined PM<sub>10</sub> emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 100.0 lb per day, 9,011 lb/1<sup>st</sup> calendar quarter, 9,111 lb/2<sup>nd</sup> calendar quarter, 9,211 lb/3<sup>rd</sup> calendar quarter, 9,211 lb/4<sup>th</sup> calendar quarter, and 18.27 tons per year. [District Rule 3.4]
- 9. The combined landfill gas usage for all combustion equipment being served by this collection system shall not exceed 2.732 million standard cubic feet per day, 245.9 million cubic feet /1st calendar quarter, 248.6 million cubic feet /2nd calendar quarter, 251.3 million cubic feet /4th calendar quarter, and 997.1 million cubic feet per year. [District Rule 3.4]"

The existing recordkeeping conditions on the ATC already require the facility to record the total amount of gas collected by the system (which is how the last condition listed above will be enforced). In order to enforce this emissions cap, the District will now also require NEO Yolo and MM Yolo to calculate the combined actual emissions on a quarterly and annual basis. The District proposed that the following language be included in the permit as ATC Condition 30 (shown here for reference only). However, based on NEO Yolo's comments received on July 7, 2010, the condition will be revised (see Section III, Comment 5b-c):

"30. The Permit Holder shall calculate and record the actual combined quarterly and annual VOC, CO, NOx, SOx, and PM10 emissions from al landfill gas combustion equipment served by this collection system. The calculations shall use actual fuel usage for each emissions unit and the emission factors from the most recent source test submitted to, and approved by, the District. [District Rule 3.4]

Because this new cap concept affects permits held by MM Yolo, in addition to NEO Yolo, the District will require MM Yolo to agree (in writing) to this cap and new recordkeeping requirements.

The re-evaluated calculations under the facility fuel cap confirm that the project no longer triggers offsets. As such, ATC Condition 4 will be deleted and the remaining conditions renumbered. On 12/03/2011, Environmental Manager Scott Overhoff provided the District with a copy of the spreadsheets that will be used to document compliance with the MM Yolo and NEO Yolo emission cap (see attached).

<u>Comment 5(b)</u>: The comment also states that  $SO_x$  is not a byproduct of combustion, that it is not generated by the flare or the engines.

Response (5b): The District disagrees with this statement.  $SO_X$  is generated by combustion, however the District agrees that the quantity is directly related to the quantity of  $H_2S$  in the gas.

It should be noted that the influent H<sub>2</sub>S concentration limit for the landfill gas combusted by the flare can not be increased above 162 ppmv because the resulting emissions increase would trigger BACT requirements. However, ATC Condition 19 (previously Condition 14) will be revised to explicitly require that the influent H<sub>2</sub>S concentration limit applies to only the landfill gas combusted in the flare. The clarification is needed since the five (5) IC engines are currently allowed a maximum influent H<sub>2</sub>S limit of 250 ppmv. Amended ATC Condition 19 will read:

"19. The hydrogen sulfide (H<sub>2</sub>S) content of the landfill gas combusted in the enclosed flare shall not exceed 162 ppmv. [District Rule 3.4]"

#### Comment 5(c):

NEO Yolo also requests that YCCL be issued a "notification" to ensure that landfill gas be sampled routinely to determine when the quality changes. NEO Yolo believes that because they don't control the type of waste accepted at the landfill, that they should not be held liable for increases in  $H_2S$  emissions. NEO Yolo requested the District arrange a meeting to discuss this issue.

#### Response 5(c):

The fact that the increase in  $H_2S$  in the gas is not under the direct control of NEO Yolo is irrelevant to the permitting rules and regulations. The District will schedule this meeting with YCCL, NEO Yolo, and MM Yolo to discuss permit related issues.

## III. Company Comments (dated July 2, 2010):

On June 1, 2010, the District arranged a meeting with Fortistar and YCCL personnel to be held at the District's office on June 29, 2010. On June 21, 2010, the District provided the two parties with copies of the draft "Title V Comment Addendums" for this revision to the proposed Title V modification and MM Yolo's proposed Title V renewal F-00536-2. During the June 29<sup>th</sup> meeting, each comment was addressed in detail and the District's position clarified. On July 7, 2010, the District received a letter (dated July 2, 2010) from Mr. Falbo acknowledging the District's responses contained in the draft "Title V Comment Addendum #2." The letter acknowledges the District's responses to Comments 3 and 4, and contains additional discussions of Comments 1, 2, and 5b-c. His comments and the District's responses are summarized below.

#### Comment 1:

NEO Yolo finds the condition acceptable given that there is a sufficient volume of landfill gas allocated for to allow the flare to operate at maximum capacity. NEO Yolo requests that the "Annual Emission Reporting" should be only for the actual emissions of the flare.

#### Response 1:

The District disagrees with comment. As previously discussed in "Response 5(a)," the District will add a total of seven (7) additional operating conditions to revised ATC C-09-91 specifically outlining the emission and fuel caps shared between the site's NEO Yolo and MM Yolo equipment. In order to demonstrate compliance with the permitted emission limits placed on the flare (presented in the Permitted Emission Limits Table of ATC C-09-91) as well as the facility cap (listed as ATC

Conditions 4-9), revised ATC Condition 30 (see below) requires that NEO Yolo quantify and report the actual annual emissions of the flare and the combined actual annual emissions for the NEO Yolo and MM Yolo equipment.

#### Comment 2:

NEO requests that revised ATC Condition 15 be amended to no longer reference the current collection system blower by its manufacturer's name (i.e., Hoffman Centrifugal).

#### Response 2:

The District agrees with the comment and will no longer list the blower's manufacturer in the condition. Revised ATC Condition 15 (previously Condition 10) will be amended to read:

"15. A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in standard cubic feet) of landfill gas collected and delivered to the site by system's collection blower. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4]"

Comment 5(b-c): NEO Yolo states that since proposed ATC Condition 30 requires that the emission factor from the most recent District approved source test be used to quantify the actual emissions of the permitted emissions unit, the permit be amended to include PM<sub>10</sub> testing requirements. NEO Yolo also clarifies that the actual SO<sub>X</sub> emissions will be calculated using the influent H<sub>2</sub>S concentrations.

Response 5(b-c): The District has amended ATC Condition 30 to clarify that NEO Yolo should use source test based emission factors when available, and that the SO<sub>x</sub> mass emissions are to be calculated using the measured inlet H<sub>2</sub>S concentration. For reference, the flare's PM<sub>10</sub> emission factor used for ATC C-09-91 is 0.0048 lb/MMBtu. Therefore, the District will not revise the ATC to include PM<sub>10</sub> source testing requirements. Revised ATC Condition 30 now reads:

- "30. The Permit Holder shall calculate and record the actual combined quarterly and annual VOC, CO, NO<sub>X</sub>, SO<sub>X</sub> (converted from the inlet  $H_2S$  concentration using mass balance), and PM<sub>10</sub> emissions from all landfill gas combustion equipment served by this collection system. The calculations shall use each emissions unit's actual fuel usage and either:
  - For pollutants with on-going source testing requirements, the emission factors from the most recent source test submitted to, and approved in writing by, the District; or
  - b. For pollutants without on-going testing requirements, the established emission factor for the emissions unit used in the most recent emission evaluation. [District Rule 3.4]"

## IV. Implementation of revised ATC C-09-91 into PTO P-26-98(a1) (December 10, 2010):

ATC C-09-91 and Permit to Operate (PTO) P-26-98(a1) have been amended to reflect the applicable response to comments received after the ATC was issued (and went through a proper public and regulatory notice periods). Since the changes to the permit and proposed Title V result in more stringent monitoring conditions and correct the quantities of emission offsets required by the application, the District will not re-notice this project. Lastly, during the implementation of revised ATC C-09-91 into PTO P-26-98(a1), ATC Condition 27 (PTO Condition 32) was revised to exclude "areas not served by the gas collection system" from the performance evaluation of the existing gas collection system. On December 10, 2010, the District issued PTO P-26-98(a1).

#### V. Recommendation:

As requested by Fortistar Methane Group Vice President Anthony Falbo, in his letter received on January 18, 2011, the District has amended the facility's Title V Operating Permit to reflect the proposed amendments of F-01348-1.

Engineer:

Date: 04/27/2011

Reviewed By

Date:

## **FORTISTAR Methane Group**

NEO Yolo LLC 44090 Road 28H, Box #3 • Woodland, California 95776 Tel. (530) 753-9109 • Fax. (530) 753-6581

July 2, 2010

Rene Toledo Yolo Solano AQMD 1947 Galileo Ct. Suite 103 Davis, CA 95616

Subject:

Title V Permit Response

NEO Yolo LLC. – PTO #P-26-98(t1)

Dear Mr. Toledo;

Attached is our response to the comments received on June 22, 2010. Thank you in advance for your assistance with this matter. Please direct all questions regarding this letter to Suparna Chakladar at (951) 833-4153.

Sincerely,

Anthony J. Falbo

Vice President and General Manager

FORTISTAR Methane Group

NEO Yolo LLC

cc: Suparna Chakladar, FMG

#### **NEO Yolo LLC Comment No. 2:**

The make and model of the blower is not relevant. The rating should be the only item mentioned on the Equipment Inventory. This is to guard against the possibility of not having a like replacement available in the event of blower failure.

## YSAQMD Response to Comment No. 2:

The District agrees with the comment and will issue a revised ATC C-09-91 with an amended Equipment Inventory in order to only list the maximum blower rating of 1,897 SCFM. If the existing blower fails, then the District will require that the source replace the unit with a like unit of the same maximum rating. If the replacement unit is determined to be of a different rating (as documented by the manufacturer or through testing), then the District will require that the permit be modified. ATC Condition 14 (previously Condition 9) will be amended to read: "All landfill gas gathered by this gas collection system shall be collected using only an approved blower with a maximum rating of 1,897 SCFM. [District Rule 3.4]" ATC Condition 29(a) (previously Condition 25(a)) will be amended to read: "Measured amount of landfill gas collected by the system's collection blower (in standard cubic feet)";

#### **NEO Yolo LLC Discussion**

NEO Yolo acknowledges the changes; however, the same change should be applied to ATC Condition 15 which specifically mentions the Hoffman Blower also.

#### **NEO Yolo LLC Comment No. 3:**

In Page 3 of the engineering evaluation, it is noted that the SIC code for both NEO Yolo was updated to 4911. Please note that 4911 is the SIC code for Electric Services. Therefore NEO Yolo needs to remain classified as 4953.

#### **YSAOMD Response to Comment No. 3:**

The District agrees and will amend the SIC Code of the gas collection system to read "4953" (Refuse System). It should be noted that the SIC Code of the collection system's current PTO P-26-98(t1) is "4911". The SIC Code is used to determine the "stationary source" for New Source Review (NSR) purposes. Stationary source is defined as all emissions units which belong to the same industrial grouping (SIC code), are located on one property (or two or more contiguous properties), and are under the same or common ownership, operation, or control. The District processed this modification with NEO Yolo and MM Yolo being a single stationary source, and Yolo County Central Landfill (YCCL) being a separate stationary source. However, based on all three of these companies equipment being located on the same (or contiguous) parcels, all three of these companies being under the same industrial grouping (2 digit SIC Code of 49), and uncertainty about common operation, or control, the District has previously requested (on July 24, 2008) a determination from U.S. EPA, Region IX. As explained by Mr. Falbo in a letter dated May 4, 2010, MM Yolo and NEO Yolo are independent companies that are commonly operated on a day-to-day basis by staff provided by "FORTISTAR Services LLC". Where the District is uncertain is whether YCCL can be considered under separate control. Since YCCL contracts out the gas collection and energy generation (from the gas generated by their facility - see YCCL Joint Technical Document, July 2007 - Page 20) and absent contracting it out, YCCL would need to operate the collection system and do something with the gas, it would seem that all three entities could be considered under common control. Otherwise, contracting out parts of operations would seem to be a simple way to circumvent aggregating provisions of NSR.

#### **NEO Yolo LLC Discussion**

NEO Yolo acknowledges the changes.

#### NEO Yolo LLC Comment No. 4:

Condition 11 is requiring measurement of landfill gas quality with a calibrated meter. Yet, the engineering evaluation notes that MMBTU calculation will be conducted using the HHV measured during source testing. We are not sure why YSAQMD is adding a condition requiring daily measurement of gas quality when they do not allow use of these measurements in MMBTU calculations. MMBTU calculations should be based on the daily landfill gas quality data points collected as follows:

MMBTU = MMscf \* CH4% (measured by calibrated portable meter) \* 1010 BTU/scf Where:

 $CH_4\%$  = the quality of landfill gas measured with the portable calibrated meter (such as a Gas Extraction Monitor)

1010 BTU/scf = Higher heating value of CH4 (HHV) according to ASTM D 3588-98, Standard Practice for Calculating Heat value, Compressibility Factor and Relative Density of Gaseous Fuels

#### **YSAOMD Response to Comment No. 4:**

Condition 11 requires the Permit Holder to measure gas quantity, not quality.

#### **NEO Yolo LLC Discussion**

NEO Yolo acknowledges this.

#### **NEO Yolo LLC Comment No. 5:**

In the emission calculations, the YSAQMD has not considered the fact that the landfill gas collected from the YCCL is handled by either the flare (NEO Yolo) or the engines (MM Yolo). The calculations for PTE from the flare should not be based on the capacity of the flare but on the capacity of the well field. The gas that is being consumed by the engines is not available for combustion in the flare. Typically, the NEO Yolo flare is for backup capacity only (used if one or more engines at MM Yolo are down). Since SOx is not a byproduct of combustion (i.e. it is not generated by the flare or the engines) and is based on the quantity of H<sub>2</sub>S in the landfill gas from YCCL, the quantity of SOx emissions are based on the combined volume of total gas handled by both NEO Yolo and MM Yolo. The emissions increase from the two facilities added together does not exceed the YSAQMD trigger threshold for offsets. We request that a condition be added to the NEO Yolo permit requiring that the total actual SOx emission from the NEO Yolo and MM Yolo facilities (combined) remain below the YSAQMD threshold for SOx emissions.

#### YSAQMD Response to Comment No. 5a:

The term PTE is a District term specific to a permit unit, not a group of permit units. For each District PTO, the District calculates a PTE which is the maximum emissions which could come from an emissions unit. For this permit (for the landfill gas collection system served by the flare), the PTE would be calculated assuming that all of the gas which could be collected by this system (using the rating of the blower) were burned in the flare. A related concept is facility New Source Review (NSR) balance, which evaluates the total emissions from a "stationary source". This calculated value is used to determine whether a stationary source exceeds the offset thresholds. District rules and regulations do allow a facility to implement an emissions cap, such that the combined emissions from multiple permit units are limited to something less than the sum of the individual permit limits. In order to enforce that, the District usually requires each permit involved to accept conditions which enforce that limit and when one permit is modified, all permits must be modified. In this case, because the cap is created by a physical limitation of how much gas can be collected, the District will allow NEO Yolo to accept a cap, without requiring the identical cap on all five (5) MM Yolo permits (until the next time that MM Yolo modifies each of their permits). The following conditions will be added to the permit as Conditions 4 - 9:

## Discussion on Title V Permit Comment Addendum

## NEO Yolo LLC 44090 Road 28H, Box #3 • Woodland, California 95776 Tel. (530) 753-9109 • Fax. (530) 753-6581

The following represent subsequent discussion regarding the YSAQMD's responses to specific comments presented to the YSAQMD in a letter dated April 7, 2010.

### **NEO Yolo LLC Comment No. 1:**

NEO Yolo does not agree with the YSAQMD setting limits on the volume of gas collected from the landfill in addition to having limits on the heat input (MMBTU flared). It must be noted that NEO is complying with the emission limits on the flare (units of lb/MMBTU). This is regardless of the volume of gas combusted since MMBTU is dependent on the quality of landfill gas that varies over the year (seasonally and based on waste acceptance at YCCL). We request that the influent gas volume limitation be removed from the permit and that the emissions be limited as they are, by heat input (MMBTU flared).

## YSAQMD Response to Comment No. 1:

The District does not agree with the comment and will not amend the permitted process limit. The collection system's current Permit to Operate P-26-98(t1), as well as this ATC C-09-91, is for the "negative pressure landfill gas collection system.", not just the flare. The landfill gas collected by the equipment operating under this permit is routed to, and combusted by, either the MM Yolo permitted engines or the flare listed as control equipment for this permit. Even though the current permit's Permitted Process Limit was previously calculated based on the heat input rating of the flare, the limit was stated as "Landfill Gas" and doesn't clarify whether this meant flared, or collected. When the District first went to public notice, the District made the same erroneous assumption as NEO Yolo and processed this modification as if the limit was just for the amount of gas flared. Based on that evaluation, because the historical amount of gas flared was not at 80% in any year in the previous five, the modification triggered offsets for all pollutants. Based on NEO Yolo's previous comments (received on October 20, 2009 where they objected to the need to provide offsets), the District reconsidered the basis of the permit and re-evaluated the modification using what we believe to be the correct interpretation that this permit is for the overall gas collection system. This re-evaluation resulted in the modification only triggering offsets for SOx. This seemed appropriate since the request in the modification was to increase the influent hydrogen sulfide (H2S) concentration, and therefore the District issued the ATC as such. To avoid any confusion, the ATC's permitted process limits were spelled out more clearly specifying both a limit on the amount of gas collected (in million cubic feet) and a limit on the amount of gas flared (in million BTUs). In addition, the ATC requires the Permit Holder to track the total landfill gas collected as well as the gas combusted in the flare. This information is essential for determining the "normal operating" conditions of the collection system as well as calculating historical actual emissions for emissions inventory purposes.

#### **NEO Yolo LLC Discussion**

NEO Yolo finds the condition acceptable given a sufficient volume is allocated to allow operation at maximum capacity.

NEO Yolo does want to comment that Annual Emission Reporting for NEO Yolo should be based ONLY on the actual emissions calculated for the Flare.

### (Refer to Draft Revised ATC C-09-91 for Conditions)

The existing record keeping conditions on the ATC already require the facility to record the total amount of gas collected by the system (which is how the last new condition above will be enforced). In order to enforce this emissions cap, the District will now also require NEO Yolo and MM Yolo to calculate the combined actual emissions on a quarterly and annual basis. The following condition will be added to the permit as Condition 30:

"The Permit Holder shall calculate and record the actual combined quarterly and annual VOC, CO, NOx, SOx, and  $PM_{10}$  emissions from all landfill gas combustion equipment served by this collection system. The calculations shall use actual fuel usage for each emissions unit and the emission factors from the most recent source test submitted to, and approved in writing by, the District. [District Rule 3.4]"

Because this new cap concept affects permits held by MM Yolo, in addition to NEO Yolo, the District will require MM Yolo to agree (in writing) to this cap are attached (see ATC C-09-91 re-evaluation) and document that the project no longer triggers offsets. As such, ATC Condition 4 will be deleted and the remaining conditions renumbered.

## YSAQMD Response to Comment No. 5b:

The District disagrees with this statement. SOx is generated by combustion, however the District agrees that the quantity is directly related to the quantity of  $H_2S$  in the gas. It should be noted that the influent  $H_2S$  concentration limit for the landfill gas combusted by the flare cannot be increased above 162 ppmv because the resulting emissions increase would trigger BACT requirements. However, ATC Condition 19 (previously Condition 14) will be revised to explicitly require that the influent  $H_2S$  concentration limit applies to only the landfill gas combusted in the flare. The qualification is needed since the five (5) IC engines are currently allowed a maximum influent  $H_2S$  limit of 250 ppmv. The amended ATC Condition will read:

"The hydrogen sulfide ( $H_2S$ ) content of the landfill gas combusted in the enclosed flare shall not exceed 162 ppmv. [District Rule 3.4]"

## YSAQMD Response to Comment No. 5c:

The fact that the increase in  $H_2S$  in the gas is not under the direct control of NEO Yolo is irrelevant to the permitting rules and regulations. The District will schedule this meeting with YCCL, NEO Yolo, and MM Yolo.

#### **NEO Yolo LLC Discussion**

MM Yolo acknowledges YSAQMD's responses with the following comments. First, regarding the calculation and recording of PM<sub>10</sub> mass emissions using fuel usage and the most recent source test data, we would request that a requirement for source testing of PM<sub>10</sub> be added to the permit to facilitate consistency. Second, it should also be noted that the SOx emissions will be calculated based on the landfill gas hydrogen sulfide concentrations which are required to be measured annually by the permit.

## YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

1947 Galileo Court, Suite 103; Davis, CA 95618

### **Emission Re-Evaluation**

 ENGINEER:
 René Toledo
 PTO # P-26-98(a1) (Reserved)

 SIC Code # 4911

FACILITY NAME: NEO Yolo LLC UTM N 4272.3 km

REASON FOR RE-EVALUATION: Upon receiving approved ATC C-09-91 (issued on 03/29/2010), Mr. Anthony Falbo, Vice President and General Manager of FORTISTAR Methane Group, submitted a comment letter (dated April 7, 2010) identifying several items his company wanted addressed by the District.

On June 1, 2010, the District arranged a meeting with FORTISTAR and YCCL personnel to be held at the District's office on June 29, 2010. On June 21, 2010, the District provided the two parties with copies of the draft "Title V Permit Comment Addendums" for this revision to proposed Title V permit F-01348-1 and MM Yolo's proposed Title V permit renewal F-00536-2. During the June 29th meeting, each comment was addressed in detail and the District's position clarified. In a letter dated July 6, 2010, Mr. Falbo acknowledges the District's responses contained in the draft "Title V Permit Comment Addendum #2" for Comments 3 and 4, and contains additional discussions of Comments 1, 2, and 5(b-c). Both sets of comments and the District's responses are summarized below.

ATC#

C-09-91

The District will now revise ATC C-09-91 to incorporate the changes discussed in this reevaluation. The District will use the "Title V Permit Comment Addendum #2" (prepared in conjunction with this re-evaluation) to document the revisions made to the facility's final Title V Permit F-01348-1. The District will only issue Title V permit F-01348-1 at the written request of NEO Yolo and after having implemented ATC C-09-91 into PTO P-26-98(a1).

## Company Comments (dated April 7, 2010):

<u>Comment 1:</u> NEO Yolo does not agree to the District's inclusion of a specific gas collection limit (in MMSCF) in addition to the heat input limits of the flare (in MMBTU flared). NEO Yolo believes that the site will remain in compliance with the permitted emission limits (in lbs/MMBTU) of the flare regardless of the amount of gas collected by the system. NEO Yolo therefore requests that the gas collection limit be removed from the permit, and only the flare combustion limit be retained.

Response 1: The District does not agree with the comment and will not amend the permitted process limit. The collection system's current Permit to Operate P-26-98(t1), as well as this ATC C-09-91, is for the "negative pressure landfill gas collection system...", not just the flare. The landfill gas collected by the equipment operating under this permit is routed to, and combusted by, either the MM Yolo permitted engines or the flare listed as control equipment for this permit. Even though the current permit's Permitted Process Limit was previously calculated based on the heat input rating of the flare, the limit was stated as "Landfill Gas" and doesn't clarify whether this meant flared, or collected. Please refer to the "Title V Permit Comment Addendum #2" for a complete discussion of the background of this issue.

<u>Comment 2:</u> NEO Yolo requests that the make and model numbers of the collection system's current blower be removed from the permit in order to allow for the "like" replacement of the unit if it ever fails.

Response 2: The District agrees with the comment and will issue a revised ATC C-09-91 with an amended Equipment Inventory in order to only list the maximum blower rating of 1,897 SCFM. If the existing blower fails, then the District will require that the source replace the unit with a like unit of the same maximum rating. If the replacement unit is determined to be of a different rating (as documented by the manufacturer or through testing), then the District will

require that the permit be modified. Revised Conditions 14 (previously Condition 9), 29(a) (previously 25(a)) are listed below. An additional comment concerning this topic was submitted by the source in a letter dated July 6, 2010 (see below).

<u>Comment 3:</u> NEO Yolo requests that the SIC Code of the gas collection system be amended from "4911" (for Electric Services) to "4953" (Refuse System).

Response 3: The District agrees and will amend the SIC Code of the gas collection system to read "4953" (Refuse System). It should be noted that the SIC Code of the collection system's current PTO P-26-98(t1) is "4911." Please refer to the "Title V Permit Comment Addendum #2" for a complete discussion of the "stationary source" as it pertains to this facility.

<u>Comment 4:</u> NEO Yolo questions the reason the District (in ATC Condition 11) is requiring daily measurement of gas quality.

Response 4: Condition 11 requires the Permit Holder to measure gas quantity, not quality.

Comment 5(a): NEO Yolo questions the methodology the District used in evaluating this permit modification. Specifically, NEO Yolo believes that because the flare is backup (to the engines operated by MM Yolo) equipment, that the Potential to Emit (PTE) should not be based on the capacity of the flare, but of the overall system. In addition, NEO Yolo is asking for the District to implement a "cap" between the flare and engines, because the landfill gas can only physically be burned in one or the other. NEO Yolo states that when the total amount of landfill gas is burned in either the flare or the engines, that the total emissions (even with the increased H2S concentration) do not exceed the District's offset thresholds for SOx.

Response 5(a): The term PTE is a District term specific to a permit unit, not a group of permit units. For each District PTO, the District calculates a PTE which is the maximum emissions which could come from an emissions unit. For this permit (for the landfill gas collection system served by the flare), the PTE would be calculated assuming that all of the gas which could be collected by this system (using the rating of the blower) were burned in the flare.

A related concept is facility New Source Review (NSR) balance, which evaluates the total emissions from a "stationary source." This calculated value is used to determine whether a stationary source exceeds the offset thresholds. District rules and regulations do allow a facility to implement an emissions cap, such that the combined emissions from multiple permit units are limited to something less than the sum of the individual permit limits. In order to enforce that, the District usually requires each permit involved to accept conditions which enforce that limit and when one permit is modified, all permits must be modified. In this case, because the cap is created by a physical limitation of how much gas can be collected, the District will allow NEO Yolo to accept a cap, without requiring the identical cap on all five (5) MM Yolo permits (until the next time that MM Yolo modifies each of their permits). The emission and fuel capacity limits for the facility will be contained in ATC conditions 4 through 9, and 30. The re-evaluation of the facility fuel cap are contained below and show that the project no longer triggers offsets. As such, ATC Condition 4 (requiring ERC's) will be replaced by the facility cap requirements. Additionally, ATC Condition 30 has been revised based on the additional comments submitted by the source (see letter dated July 6, 2010).

<u>Comment 5(b):</u> The comment also states that SOx is not a byproduct of combustion, that it is not generated by the flare or engines.

**Response 5(b):** The District disagrees with this statement. SOx is generated by combustion, however the District agrees that the quantity is directly related to the quantity of H2S in the gas.

It should be noted that the influent H2S concentration limit for the landfill gas combusted by the flare can not be increased above 162 ppmv because the resulting emissions increase would trigger BACT requirements. However, ATC Condition 19 (previously Condition 14) will be revised to explicitly require that the influent H2S concentration limit applies to only the landfill

gas combusted in the flare. The qualification is needed since the five (5) IC engines are currently allowed a maximum influent H2S limit of 250 ppmv.

Comment 5(c): NEO Yolo also requests that YCCL be issued a "notification" to ensure that landfill gas be sampled routinely to determine when the quality changes. NEO Yolo believes that because they don't control the type of waste accepted at the landfill, that they should not be held liable for increases in H2S emissions. NEO Yolo requested the District arrange a meeting to discuss this issue.

Response 5(c): The fact that the increase in H2S in the gas is not under the direct control of NEO Yolo is irrelevant to the permitting rules and regulations. However, the District will schedule this meeting with YCCL, NEO Yolo, and MM Yolo to discuss the issues associated with this stationary source.

## Additional Company Comments (dated July 6, 2010):

Comment 1: NEO Yolo finds the condition acceptable given that there is a sufficient volume of landfill gas allocated for to allow the flare to operate at maximum capacity. NEO Yolo requests that the "Annual Emission Reporting" should be only for the actual emissions of the flare.

Response 1: The District disagrees with this comment. As previously discussed in "Response 5(a)," the District will add a total of seven (7) additional operating conditions to revised ATC C-09-91 specifically outlining the emission and fuel caps shared between the site's NEO Yolo and MM Yolo equipment. In order to demonstrate compliance with the permitted emission limits placed on the flare (presented in the Permitted Emission Limits Table of ATC C-09-91) as well as the facility cap (listed as ATC Conditions 4-9), revised ATC Condition 30 (see below) requires that NEO Yolo quantify and report the actual annual emissions of the flare and the combined actual annual emissions for the NEO Yolo and MM Yolo equipment.

<u>Comment 2:</u> NEO requests that revised ATC Condition 15 be amended to no longer reference the current collection system blower by its manufacturer's name (i.e., Hoffman Centrifugal).

Response 2: The District agrees with the comment and will no longer list the blower's manufacturer in Condition 15 (previously Condition 10 - see below).

<u>Comment 5(b-c)</u>: NEO Yolo states that since proposed ATC Condition 30 requires that the emission factor from the most recent District approved source test be used to quantify the actual emissions of the permitted emissions unit, the permit be amended to include PM10 testing requirements. NEO Yolo also clarifies that the actual SOx emissions will be calculated using the influent H2S concentrations.

Response 5(b-c): The District agrees with the comment and has amended ATC Condition 30 to clarify that NEO Yolo should use source test based emission factors when available, and that the SOX mass emissions are to be calculated using the measured inlet H2S concentration. For reference, the flare's PM10 emission factor used for ATC C-09-91 is 0.0048 lb/MMBtu. Therefore, the District will not revise the ATC to include PM10 source testing requirements. Revised ATC Condition 30 is listed below.

#### LIST OF AMENDMENTS:

In light of the items discussed above and the June 29th meeting, the District has made the following amendments to proposed ATC C-09-91:

## **Process Description and Condition 13:**

In order to avoid further confusion, the District will replace the term "bioreactor" with the term "non-conventional." Although YCCL is permitted to add liquids to certain waste units, it is prohibited from exceeding an average waste moisture content of 40%. As such, these "non-conventional" waste cells do not meet the definition of bioreactor contained in 40 CFR Part 63, Subpart AAAA (waste management units with an average moisture content above 40% where liquid is added to accelerate or enhance biodegredation of waste).

### Condition 14 (previously Condition 9) will be amended to read:

- All landfill gas gathered by this gas collection system shall be collected using only an approved blower with a maximum rating of 1,897 SCFM.

#### Condition 19 (previously Condition 14) will be amended to read:

- The hydrogen sulfide (H2S) content of the landfill gas combusted in the enclosed flare shall not exceed 162 ppmv.

#### Condition 29(a) (previously Condition 25(a)) will be amended to read:

- Measured amount of landfill gas collected by the system's collection blower (in standard cubic feet).

Additional conditions to be amended or added to ATC C-09-91:

#### Condition 4:

- The combined VOC emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 114.6 lb per day, 10,325 lb/1st calendar quarter, 10,440 lb/2nd calendar quarter, 10,554 lb/3rd calendar quarter, 10,554 lb/4th calendar quarter, and 20.94 tons per year. [District Rule 3.4]

#### Condition 5:

- The combined CO emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 844.2 lb per day, 75,980 lb/1st calendar quarter, 76,825 lb/2nd calendar quarter, 77,669 lb/3rd calendar quarter, 77,669 lb/4th calendar quarter, and 154.07 tons per year. [District Rule 3.4]

#### Condition 6:

- The combined NOx emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 234.5 lb per day, 21,106 lb/1st calendar quarter, 21,341 lb/2nd calendar quarter, 21,575 lb/3rd calendar quarter, 21,575 lb/4th calendar quarter, and 42.80 tons per year. [District Rule 3.4]

#### **Condition 7:**

- The combined SOx emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 126.0 lb per day, 11,346 lb/1st calendar quarter, 11,472 lb/2nd calendar quarter, 11,598 lb/3rd calendar quarter, 11,598 lb/4th calendar quarter, and 23.01 tons per year. [District Rule 3.4]

#### **Condition 8:**

- The combined PM10 emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 100.0 lb per day, 9,011 lb/1st calendar quarter, 9,111 lb/2nd calendar quarter, 9,211 lb/3rd calendar quarter, 9,211 lb/4th calendar quarter, and 18.27 tons per year. [District Rule 3.4]

#### Condition 9:

- The combined landfill gas usage for all combustion equipment being served by this collection system shall not exceed 2.732 million standard cubic feet per day, 245.9 million cubic feet /1st calendar quarter, 248.6 million cubic feet /2nd calendar quarter, 251.3 million cubic feet /3rd calendar quarter, 251.3 million cubic feet /4th calendar quarter, and 997.1 million cubic feet per year. [District Rule 3.4]

#### **Condition 16:**

- A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in standard cubic feet) of landfill gas collected and delivered to the site by system's collection blower. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4]

#### Condition 30:

- The Permit Holder shall calculate and record the actual combined quarterly and annual VOC, CO, NOx, SOx (converted from the inlet H2S concentration using mass balance), and PM10 emissions from all landfill gas combustion equipment served by this collection system. The calculations shall use each emissions unit's actual fuel usage and either:
- a. For pollutants with on-going source testing requirements, the emission factors from the most recent source test submitted to, and approved in writing by, the District; or
- b. For pollutants without on-going testing requirements, the established emission factor for the emissions unit used in the most recent emission evaluation. [District Rule 3.4]

The following is a re-evaluation of the flare's emissions and a discussion of any rules and regulations affected by the changes. Any portion of the previous evaluation that has not been affected by this revision has been omitted since the findings will not change.

### **RULE & REGULATION COMPLIANCE EVALUATION:**

#### **District Rule 3.4-New Source Review (Revised)**

## PROPOSED EMISSION SUMMARY FOR NEW OR MODIFIED PERMIT

VOC CO NOx SOx PM10	<u>Daily</u> 14.9 lb 484.8 lb 78.6 lb 78.4 lb 6.3 lb			2.73 88.44 14.39 14.3	early 3 tons 8 tons 5 tons 1 tons 5 tons	Use for annual billing Use for annual billing Use for annual billing Use for annual billing Use for annual billing
			Quarterly			
		1st	2nd	<u>3rd</u>	<u>4th</u>	
VOC		344	1,359	1,374	1,374	
CO		,636	44,121	44.606	44,606	
NOx		076	7,155	7,233	7,233	(
SOx		058	7,136	7,215	7,215	
PM10	· · · · · · · · · · · · · · · · · · ·	666	572	579	579	
	Previous quarterly	potenti	ial to emit for n	nodified pe	rmit*	
		st	2nd	3rd	4th	
VOC (lb)		344	1,359	1,374	1,374	
CO (lb)		,636	44,121	44,606	44,606	
NOx (lb)		076	7,155	7,233	7,233	
SOx (lb)		21	224	226	226	
PM10 (lb)	5	66	572	579	579	

<sup>\*</sup> Emissions from PTO P-26-98(t1) (issued 05/26/2004) and does not include the emissions from the propane fired pilot burner since they are considered negligible.

## Historic potential emissions for modified permit\*

	<u>1st</u>	2nd	3rd	<u>4th</u>	
VOC (lb)	1,344	1,359	1,374	1.374	
CO (lb)	43,636	44,121	44,606	44,606	
NOx (lb)	7,076	7,155	7.233	7,233	
SOx (lb)	221	224	226	226	
PM10 (lb)	566	572	579	579	
and allowing their Director of the control of	4 444 4 100			0.0	

<sup>\*</sup> As discussed above, the District has re-evaluated the landfill gas collection system's HPE using the total amount of landfill gas gathered by the Hoffman blower (instead of just the amount of gas combusted in the flare) over the last five year baseline period (2004-2008). The 2004 throughput report forms for the five MM Yolo engines and the NEO Yolo flare document that Hoffman blower and associated gas collection equipment gathered a total of 362,884.5 BTU's of landfill gas. Using a landfill gas HHV of 450 BTU/SCF (so as to be consistent with the conversion methodology historically used for this source), the system collected a total of 836.3 MMSCF of landfill gas. This was 83.9% of the Hoffman blower's rated process limit of 448,678 MMBtu (997.06 MMScf). Therefore, because the historic emissions are over 80% in at least one year out of the last five, the HPE equals the previous PTE.

		BACT		
<u>Pollutant</u>	<u>Trigger</u> (lb/day)	Proposed (Ib/dex)	<b>Quarterly Increase</b>	BACT
1/00		(lb/day)		
VOC	10	15	No	No
CO	250	485	No	No
NOx	10	79	No	No
SOx	80	78	Yes	No
PM10	80	6	No	No

#### **OFFSETS**

## Quarterly permitted emissions for other permits at the stationary source \*

	<u>1st</u>	<u>2nd</u>	3rd	4th
VOC (lb)	10,325	10,440	10,554	10,554
CO (lb)	75,980	76,825	77,669	77,669
NOx (lb)	21,106	21,341	21,575	21,575
SOx (lb)	11,346	11,472	11,598	11.598
PM10 (lb)	9,011	9,111	9,211	9,211

<sup>\*</sup> Maximum quarterly PTE for the facility under the new emissions cap of revised ATC C-09-91 to be shared between the single flare and all five engines (see Quarterly PTE worksheet dated 04/20/2010).

## Quarterly permitted emissions for the stationary source including proposed emissions\*

	<u>1st</u>	<u>2nd</u>	3rd	4th
VOC (lb)	10,325	10,440	10,554	10,554
CO (lb)	75,980	76,825	77,669	77,669
NOx (lb)	21,106	21,341	21,575	21,575
SOx (lb)	11,346	11,472	11,598	11,598
PM10 (Ib)	9,011	9,111	9,211	9,211

<sup>\*</sup> Maximum quarterly PTE for the facility under the new emissions cap of revised ATC C-09-91 to be shared between the single flare and all five engines (see Quarterly PTE worksheet dated 04/20/2010).

	<u>Offs</u>	Offset triggers			
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	
VOC (lb)	7,500	7,500	7,500	7,500	
CO (lb)	49,500	49,500	49,500	49,500	
NOx (lb)	7,500	7,500	7,500	7,500	
SOx (lb)	13,650	13,650	13,650	13,650	
PM10 (lb)	13,650	13,650	13,650	13,650	

## Quantity of offsets required

	1st	2nd	3rd	<u>4th</u>
VOC (lb)	0	0	0	0
CO (lb)	0	0	0	0
NOx (lb)	0	0	0	0
SOx (lb)	0	0	0	0
PM10 (lb)	0	0	0	0

#### MAJOR MODIFICATION

Facility Total Potential to Emit *	Major Source Thresholds
20.94 TPY VOC	25 TPY VOC
154.07 TPY CO	100 TPY CO
42.80 TPY NOx	25 TPY NOx
23.01 TPY SOx	100 TPY SOx
18.27 TPY PM10	100 TPY PM10

<sup>\*</sup> Emissions Cap for MM Yolo Power LLC and NEO Yolo LLC (see Quarterly PTE worksheet dated 04/20/2010).

### Last five year emission aggregate\*

1.02 TPY VOC 58.64 TPY CO 0.66 TPY NOx 15.64 TPY SOx 16.05 TPY PM10

## Major Modification Thresholds

25 TPY VOC 100 TPY CO 25 TPY NOx 40 TPY SOx 25 TPY PM10

## Result: The proposed modification is not a major modification

#### **PUBLIC NOTICE**

### "Increase in historic potential to emit"

0 lb VOC/quarter 0 lb CO/quarter 0 lb NOx/quarter 6,989 lb SOx/quarter 0 lb PM10/quarter

## Exemption level for notification

7,500 lb VOC/quarter 49,500 lb CO/quarter 7,500 lb NOx/quarter 13,650 lb SOx/quarter 13,650 lb PM10/quarter

#### Result: Public notice is not required

#### **District Rule 3.8-Federal Operating Permits**

The revisions to the ATC were made in response to comments received from the source (on April 7, 2010) after the issuance of the amended ATC (see above). Since the revisions to the permit result in more stringent monitoring conditions (i.e. explicit tracking and reporting of landfill gas gathered by the collection system and combusted within the flare), the District will not re-notice this project.

The District plans to use "Title V Permit Comment Addendum #2" (prepared along with this re-evaluation) to document the changes between the final version of the Title V permit (to be issued), and the proposed version of the Title V permit dated March 29, 2010. The District will only issue Title V permit F-01348-1 after having implemented ATC C-09-91 into PTO P-26-98(a1), and at the written request of NEO Yolo. The District will at that time provide the source, CARB and U.S. EPA with a copy of the final Title V Permit F-01348-1 and the final version of "Title V Permit Comment Addendum #2."

### **District Rule 3.20-Ozone Transport Mitigation**

As documented above, the facility total PTE is above 10 tons per year for VOC or NOx, and therefore the post-project Stationary Source Potential to Emit (SSPE) will be calculated.

## Annual permitted emissions for the stationary source including proposed emissions\*

VOC (lb)

47,326

lbs

## Annual permitted emissions for equipment which is exempt from Rule 3.4\*

VOC (lb)

0

lbs

NOx (lb)

0

lbs

#### Post -project Stationary Source Potential to Emit (SSPE)

VOC (lb)

47.326

lbs

NOx (lb)

114,295

lbs

Because the post-project SSPE is greater than 10 tons (20,000) lbs per year for both VOC and NOx, per section 301.1, calculations shall be performed to determine the quantity of mitigation required, if any.

<sup>\*</sup> Emissions Cap for MM Yolo Power LLC and NEO Yolo LLC (see 5-Year Emission Aggregate worksheet dated 04/20/2010).

NOx (ib) 114,295 lbs

<sup>\*</sup> SSPE for proposed MM Yolo Power LLC and NEO Yolo, LLC units (see Quarterly PTE worksheet dated 09/21/2009).

<sup>\*</sup> There are currently no Rule 3.4 exempt units operating at the facility.

## Pre -project Stationary Source Potential to Emit (SSPE) \*

VOC (lb) NOx (lb) * Sum of the current PTE's for all MN 09/21/2009).	47,326 114,295 /I Yolo Power, LLC and NEO Y	ibs ibs olo, LLC emission unit	s (see Quarterly PTE worksheet dated
<u>Quar</u>	ntity of offsets required by R	ule 3.4 *	
VOC (Ib) NOx (Ib) * Due to the revisions in the Historica VOC and NOx pollutants.	0 0 al Potential Emissions calculati	lbs lbs on of this re-evaluation	, the application no longer triggers offsets
Quant	ity of Mitigation required by	Rule 3.20	
VOC (Ib) NOx (Ib)	0 0	lbs lbs	
COMMENTS:	<ul><li>91. This re-evaluation was p evaluation amendment.</li><li>This re-evaluation does not to</li></ul>	erformed in order to re	ource's comments after issuing ATC C-09- solve issues contained in the previous or mitigation credit requirements. To ensure
	the source's compliance with to include the above mention	the findings of this re-	evaluation, ATC C-09-91 has been revised
RECOMMENDATIONS:	Issue revised Authority to Co	nstruct C-09-91.	
Engineer:	Susc K Chiz		Date: <u>07/15/20</u> 10
Reviewed by:	Suse K Chiz	esti.	Date: 7/16/10



Engineer: René Toledo

MM Yolo Power LLC - Facility ID # NEO Yolo LLC - Facility ID #

00259 01419 4911 & 4953

Facility Name: MM Yolo Power, LLC and NEO Yolo, LLC \*

Date of Initial Determination:
Date of Previous Determination:
Date of Current Determination:

SIC Code #

05/12/2005 09/21/2009 04/20/2010

Location: 44090 County Road 28H (Yolo County Central Landfill);

Woodland, CA

Process	Issued Permits	Date PTO Issued	ATC	Date ATC Issued	VOC (tpy)	CO (tpy)	NOx (tpy)	SOx (tpy)	PM10
IC Engines #1, 2, 3, and 4	P-72-90(t)	08/12/1997	N/A		0.00	0.00	0.00	0.00	(tpy) 0.00
Flare (18.5 MMBtu/hr)	P-73-90(t1)	08/12/1997	N/A	-	0.00	0.00	0.00	0.00	0.00
Flare (54.6 MMBtu/hr)	P-26-98	07/13/1998	C-98-01	01/20/1998	0.00	85.26	14.00	0.35	1.06
IC Engine #1 (805 BHP)	P-78-98	11/10/1998	C-98-120	10/14/1998	0.00	14.65	0.00	1.16	16.47
IC Engine #2 (805 BHP)	P-79-98	11/10/1998	C-98-121	10/14/1998	_	2	-		10.47
IC Engine #3 (805 BHP)	P-80-98	11/10/1998	C-98-122	10/14/1998	_			_	-
IC Engine #4 (805 BHP)	P-81-98	11/10/1998	C-98-123	10/14/1998	_	-	-	_	•
IC Engine #5 (603 BHP)	P-87-98	03/01/1998	C-98-124	10/14/1998	_	2		_	•
IC Engine #1A (805 BHP)	P-78-98(a)	11/12/2003	C-02-125	07/15/2002	0.00	0.00	0.00	0.00	0.00
Flare (54.6 MMBtu/hr)	P-26-98(t)	05/21/2002	-	-	0.00	0.00	0.00	0.00	0.00
Flare (54.6 MMBtu/hr)	P-26-98(a)	11/26/2002	C-02-168	10/23/2002	0.00	0.24	0.40	0.00	0.00
Flare (54.6 MMBtu/hr)	P-26-98(t1)	05/26/2004	-	-	0.00	0.00	0.00	0.00	0.00
IC Engine #3A (1306 BHP)	•	-	C-04-151 b, c	07/21/2005	0.00	17.70	0.00	0.00	0.29
IC Engine #4A (1306 BHP)	P-81-98(a)	App. Canceled <sup>d</sup>	C-04-152 °	07/21/2005	0.00	17.70	0.00	0.00	0.29
IC Engine #5A (1306 BHP)	P-87-98(a)	App. Canceled <sup>d</sup>	C-04-153 °	07/21/2005	1.02	23.30	0.66	0.39	0.29
IC Engine #1A (805 BHP)	P-78-98(a1)	12/11/2006	C-04-179	07/21/2005	0.00	0.00	0.00	0.00	0.00
IC Engine #2 (805 BHP)	P-79-98(a)	12/11/2006	C-04-180	07/21/2005	0.00	0.00	0.00	0.00	0.00
IC Engine #1A (805 BHP)	P-78-98(a2)	12/31/2007	C-07-35 °	08/09/2007	0.00	0.00	0.00	2.33	3.18
IC Engine #2 (805 BHP)	P-79-98(a1)	12/31/2007	C-07-36 e	08/09/2007	0.00	0.00	0.00	2.33	3.18
IC Engine #3A (1306 BHP)	-	-	C-07-37 °	08/09/2007	0.00	17.68	0.00	3.53	3.19
C Engine #4A (1306 BHP)	P-81-98(a1)	12/31/2007	C-07-38 °	08/09/2007	0.00	17.68	0.00		
C Engine #5A (1306 BHP)	P-87-98(a1)	12/31/2007	C-07-39 e	08/09/2007	1.02	23.28	0.66	3.53 3.92	3.19 3.31
lare (54.6 MMBtu/hr)	P-26-98(a1)	Sport Bill	C-09-91 (REV) 1	PENDING	0.00	0.00	0.00	0.00	0.00
				TOTAL 9	1.02	58.64	0.66	15.64	16.05

<sup>&</sup>lt;sup>a.</sup> As defined in Rule 3.4, Section 238, a stationary source includes all permitted emission units that: 1) belong to same industrial grouping, 2) are located on one property (or on two contiguous properties), and 3) are under the same or common ownership, operation, or control. Because the MM Yolo Power engines and the NEO Yolo flare 1) belong to same industrial grouping, 2) are located on the same parcel of property, and 3) are commonly operated by FORTISTAR Services, LLC personnel (see letter dated May 3, 2010), the District considers the MM Yolo and NEO Yolo equipment to be part of the same stationary source. Therefore, this evaluation will account for emission aggregates from all the MM Yolo and NEO b. ATC C-04-151 was approved on 07/21/2005, however the proposed unit was not installed and a Permit Notification Card was not received. As such, PTO number P-80-98(a) has not yet been assigned in the District's permit database.

COMMENTS: These permits are sorted by the ATC issuance date. According to Rule 3.4 Section 221, a major modification is calculated based on all creditable increases and decreases from the source over the period of five consecutive years before the application, including the calendar year of the most recent application. The applicable period ranges from April 2004 through the present.

Engineer:

Date: 07/12/20/0

Reviewed by:

Date: 7 14 2018

Page 1 of

G:\engineer\nsr\offsets\qtr\_pte\MM Yolo Power-Neo Yolo.5 yr.xlsx,04-20-2010

<sup>&</sup>lt;sup>c.</sup> Because PTO applications P-81-98(a), and P-87-98(a1) can not be implemented and their ATC's will be superseded by ATC C-07-37, C-07-38, and C-07-39 (respectfully), the previously 5-year emission aggregate calculated for each engine will not be included in the worksheet's total.

d. Permit Notification cards for ATC's C-04-152 and C-04-153 were received. However, the unit's failed to comply with the particulate and hydrogen sulfide emission limits. Therefore, the PTO applications P-81-98(a) and P-87-98(a) have been canceled and new ATC applications submitted.

e. ATC's C-07-35, C-07-36, C-07-37, C-07-38, and C-07-39 propose an increase in the permitted particulate and hydrogen sulfide emission limits for the facility.

f. ATC C-09-91 has been re-evaluated to incorporate a facility wide landfill gas fuel cap that will limit the total amount of landfill gas that can be combusted by the five IC engines of MM Yolo Power and the flare of NEO Yolo Power. The cap has been set equal to the maximum rating of the existing gas collection blower (1897 SCFM) over a 24 hour per day, 365 day per year operating schedule. As such, ATC C-09-91 results in a no-net increase in emissions over the last five years.

g. All decreases in PTE have been treated as zero net change and not included in the Total 5-Year Aggregate summation.

## YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

1947 Galileo Court, Suite 103; Davis, CA 95618 Phone (530) 757-3650 Fax (530) 757-3670

**FACILITY NUMBER: 01419** SIC CODE: 4953

> REVISED AUTHORITY TO CONSTRUCT C-09-91 IS HEREBY GRANTED TO

> > **NEO YOLO LLC** 5087 Junction Road Lockport, NY 14094

**EQUIPMENT LOCATION:** 

44090 County Road 28H; Woodland, CA

#### **TO CONSTRUCT**

PROCESS DESCRIPTION: Negative pressure landfill gas collection system that collects landfill gas from the conventional and non-conventional portions of the landfill; Modification of P-26-98(t1) to increase the flare's allowable influent hydrogen sulfide concentration and SO, mass emissions, and increase the total number of gas wells serving the conventional portions of the landfill from 175 to 350. without a change in the system's existing blower rating.

EQUIPMENT INVENTORY: Landfill gas collection system, including: methane gas collection wells not to exceed 350 vertical and horizontal wells serving the conventional portions of the landfill; condensate traps; one (1) collection system blower (rated at 1,897 SCFM); and associated piping and valves.

- Total Billing: Schedule 8, Misc. -

### CONTROL EQUIPMENT INVENTORY:

One (1) 54.6 MMBtu/hr landfill gas fired LFG Specialties enclosed flare, Model F-2000, with a one (1) second residence time (shared with PTO P-15-05)

### **PERMITTED EMISSION LIMITS:**

Pollutant	Daily [lb]	<b>Qtr #1</b> (Jan 1-Mar 31) [ <b>[b]</b>	Qtr #2 (Apr 1-June 30) [lb]	Qtr #3 (July 1-Sept 30) [[b]	Qtr #4 (Oct 1-Dec 31) [lb]	Yearly [tons]
VOC	14.9	1,344	1,359	1,374	1,374	2.73
CO	484.8	43,636	44,121	44,606	44,606	88.48
NO <sub>X</sub>	78.6	7,076	7,155	7,233	7,233	14.35
SO <sub>x</sub>	78.4	7,058	7,136	7,215	7,215	14.31
PM <sub>10</sub>	6.3	566	572	579	579	1.15

#### PERMITTED PROCESS LIMITS:

	Daily	Qtr #1 (Jan 1-Mar 31)	Qtr #2 (Apr 1-June 30)	Qtr #3 (July 1-Sept 30)	Qtr #4 (Oct 1-Dec 31)	Yearly
Total Amount of Landfill Gas Gathered by the Collection System [million standard cubic feet]	2.732	245.9	248.6	251.3	251.3	997.1
Landfill Gas Combusted in the Flare [million British Thermal Units]	1,310.4	117,936	119,246	120,557	120,557	478,296

The following information is included to inform and assist the Permit Holder in achieving compliance with applicable provisions of Federal, State, and District Rules and Regulations. The following set of referenced regulations are not intended to be either comprehensive or exclusive, nor are they intended to be emission limiting permit conditions, but they are still applicable rules of the District. Occasionally laws are amended. The amended versions of the referenced rules shall be deemed to be in effect. It is the Permit Holder's responsibility to comply with all applicable Rules and Regulations.

- 1. After construction of all listed process and control equipment is complete, as determined by the District, the ATC Holder shall have 45 calendar days to conduct tests and perform other necessary initial adjustments on the equipment. During this time, this Authority to Construct and its conditions shall function as a temporary Permit to Operate. Any operation of the equipment beyond this period without either District receipt of a valid Permit to Operate Notification Card or written extension from the District, will be considered operation without a permit and subject to enforcement action. The ATC Holder shall provide the District, in writing, a notice prior to commencing the 45-day start-up period. [District Rule 3.1, §402]
- 2. The District requires an inspection of the equipment after completion of the construction and prior to the issuance of the Permit to Operate. [District Rule 3.1, §402]

3. An authorization to construct shall remain in effect only until the application for Permit to Operate is granted or denied; however, such an authorization shall not remain in effect beyond two (2) years from the date of issuance unless the District finds that the time required for construction requires an extension and grants one or more extensions, for a total time not to exceed five (5) years from the date of issuance. [District Rule 3.1, §407]

The following set of conditions are established by the District to provide enforceable operating parameters as authorized by California Health and Safety Code Section 42301 and District Rule 3.1, Section 402. If any of the rules and regulations referenced below are amended subsequent to the issuance date of this permit, resulting in the amended rule differing from or superseding the corresponding condition, then the Permit Holder shall be required to comply with the amended rule or regulation and shall no longer be required to comply with the superseded condition.

- 4. The combined VOC emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 114.6 lb per day, 10,325 lb/1<sup>st</sup> calendar quarter, 10,440 lb/2<sup>nd</sup> calendar quarter, 10,554 lb/3<sup>rd</sup> calendar quarter, 10,554 lb/4<sup>th</sup> calendar quarter, and 20.94 tons per year. [District Rule 3.4]
- 5. The combined CO emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 844.2 lb per day, 75,980 lb/1<sup>st</sup> calendar quarter, 76,825 lb/2<sup>nd</sup> calendar quarter, 77,669 lb/3<sup>rd</sup> calendar quarter, 77,669 lb/4<sup>th</sup> calendar quarter, and 154.07 tons per year. [District Rule 3.4]
- 6. The combined  $NO_X$  emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 234.5 lb per day, 21,106 lb/1<sup>st</sup> calendar quarter, 21,341 lb/2<sup>nd</sup> calendar quarter, 21,575 lb/3<sup>rd</sup> calendar quarter, 21,575 lb/4<sup>th</sup> calendar quarter, and 42.80 tons per year. [District Rule 3.4]
- 7. The combined  $SO_X$  emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 126.0 lb per day, 11,346 lb/1<sup>st</sup> calendar quarter, 11,472 lb/2<sup>nd</sup> calendar quarter, 11,598 lb/3<sup>rd</sup> calendar quarter, 11,598 lb/4<sup>th</sup> calendar quarter, and 23.01 tons per year. [District Rule 3.4]
- 8. The combined PM<sub>10</sub> emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 100.0 lb per day, 9,011 lb/1<sup>st</sup> calendar quarter, 9,111 lb/2<sup>nd</sup> calendar quarter, 9,211 lb/3<sup>nd</sup> calendar quarter, 9,211 lb/4<sup>th</sup> calendar quarter, and 18.27 tons per year. [District Rule 3.4]
- 9. The combined landfill gas usage for all combustion equipment being served by this collection system shall not exceed 2.732 million standard cubic feet per day, 245.9 million cubic feet /1<sup>st</sup> calendar quarter, 248.6 million cubic feet /2<sup>nd</sup> calendar quarter, 251.3 million cubic feet /3<sup>rd</sup> calendar quarter, 251.3 million cubic feet /4<sup>th</sup> calendar quarter, and 997.1 million cubic feet per year. [District Rule 3.4]
- 10. The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
  - a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
  - b. Greater than 20% opacity. [District Rule 3.4]

- 11. The Permit Holder shall operate the enclosed flare with a minimum combustion zone residence time of 1 second, and shall equip the flare with automatic temperature controls designed to control the average minimum temperature at or above a minimum temperature of 1400 °F. The enclosed flare shall also be equipped with an automatic shutoff gas valve and an automatic re-start system. [District Rule 3.4]
- 12. Only landfill gas shall be burned in the flare. No supplemental fuel may be burned in the flare, excluding pilot gas. [District Rule 3.4]
- 13. The number and types of components used by the operation shall match the equipment listed in the EQUIPMENT INVENTORY section of the permit. The Permit Holder shall maintain a complete list of all associated gas collection equipment serving the conventional portions of the landfill, which includes a description of each system component. Any wells, piping, or valves installed in the non-conventional portions of the landfill are not covered under this permit. This list shall be kept onsite and shall be made available to the District upon request. [District Rule 3.4]
- 14. All landfill gas gathered by this gas collection system shall be collected using only an approved blower with a maximum rating of 1,897 SCFM. [District Rule 3.4]
- 15. A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in standard cubic feet) of landfill gas collected and delivered to the site by system's collection blower. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4]
- 16. A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in standard cubic feet) of landfill gas combusted in the flare. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4]
- 17. The Permit Holder shall install and maintain such facilities on the flare stack as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with Air Resources Board Test Method 1. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.4]
- 18. The particulate matter (as PM<sub>10</sub>) emission concentration for the enclosed flare shall not exceed 0.0035 gr/dscf at standard conditions. [District Rule 3.4]
- 19. The hydrogen sulfide (H<sub>2</sub>S) content of the landfill gas combusted in the enclosed flare shall not exceed 162 ppmv. [District Rule 3.4]
- 20. The Permit Holder shall analyze the fuel's higher heating value (wet basis) and sulfur content (as H<sub>2</sub>S) at least once every twelve (12) consecutive month period. [District Rule 3.4]
- 21. The emission concentrations for the flare shall not exceed the following:
  - a. VOC (measured as hexane): 0.0114 lb/MMBTU;
  - b. CO: 0.370 lb/MMBTU; and
  - c. NO<sub>x</sub> (as NO<sub>2</sub>): 0.060 lb/MMBTU. [District Rule 3.4]

- 22. The Permit Holder shall perform a source test at least once every twelve (12) months in order to demonstrate compliance with the VOC, CO, and NO<sub>X</sub> emission limits. [District Rule 3.4]
- 23. Source testing shall be conducted using the following test methods:
  - a. VOC EPA Method 18, or other District approved methods;
  - b. CO EPA Method 10 or CARB Method 100;
  - c. NO<sub>x</sub> (as NO<sub>2</sub>) EPA Method 7E or CARB Method 100; and
  - d. Stack gas oxygen EPA Method 3A or CARB Method 100. [District Rule 3.4]
- 24. The District must be notified prior to any emissions testing event and a protocol must be submitted for approval thirty (30) days prior to testing. The results of an emissions testing event shall be submitted to the District within sixty (60) days of the test date. The protocol and report shall be mailed to the attention of the Supervising Air Quality Engineer. [District Rule 3.4]
- 25. The Permit Holder shall maintain a written log of all maintenance work performed that requires the shutdown of the gas collection system. The log shall include a description of work, the date work was performed, and the amount of time needed to complete the maintenance work. Emissions of landfill gas to the atmosphere shall be minimized during each shutdown. [District Rule 3.4]
- 26. The Permit Holder shall operate the gas collection system in a manner which maximizes the amount of landfill gas extracted from the landfill, while preventing overdraw that can cause a fire or the damage of the gas collection system. [District Rule 3.4]
- 27. Except for active disposal areas, or areas undergoing maintenance or repair, the Permit Holder shall operate the gas collection system in such a manner that the surface emissions testing of the landfill demonstrates the concentrations of total organic compounds (measured as methane) do not exceed 500 ppmv at any point on the surface of the solid waste disposal site or along the gas transfer path of the gas collection system. [District Rule 3.4]
- 28. The Permit Holder shall comply with all applicable standards, criteria and requirements of Section 60.752(b) of 40 CFR Part 60, Subpart WWW, Standards of Performance fo Municipal Solid Waste Landfills, upon determination by the District that the Yolo County Central Landfill's uncontrolled non-methane organic compounds (NMOC) emission rate exceeds 50 megagrams per year. [District Rule 3.4]
- 29. The Permit Holder shall monitor and record on a daily basis the following quantities of landfill gas:
  - a. Measured amount of landfill gas collected by the system's collection blower (in standard cubic feet);
  - b. Measured amount of landfill gas combusted in the flare (in standard cubic feet); and
  - c. Calculated amount of landfill gas combusted in the flare (in British thermal units). [District Rule 3.4]

- 30. The Permit Holder shall calculate and record the actual combined quarterly and annual VOC, CO, NO<sub>x</sub>, SO<sub>x</sub> (converted from the inlet H<sub>2</sub>S concentration using mass balance), and PM<sub>10</sub> emissions from all landfill gas combustion equipment served by this collection system. The calculations shall use each emissions unit's actual fuel usage and either:
  - a. For pollutants with on-going source testing requirements, the emission factors from the most recent source test submitted to, and approved in writing by, the
  - b. For pollutants without on-going testing requirements, the established emission factor for the emissions unit used in the most recent emission evaluation. [District Rule 3.4]
- 31. The Permit Holder shall maintain all records on site for a period of five (5) years from the date of entry and these records shall be made readily available to District personnel upon request. [District Rule 3.8, §302.6(b)]

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health & Safety Codes of the State of California or the Rules and Regulations of the Yolo-Solano Air Quality Management District.

Mat Ehrhardt, P.E.

AIR POLLUTION CONTROLIOFFICER

By:

Date of Issuance: March 29, 2010

Date of Revision: July 16, 2010

## YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

1947 Galileo Court, Suite 103; Davis, CA 95618 Phone (530) 757-3650 Fax (530) 757-3670

**FACILITY NUMBER: 01419** SIC CODE: 4953

**DATE EXPIRES:** 

July 13, 2011 Unless Renewed

PERMIT TO OPERATE

P-26-98(a1) IS HEREBY GRANTED TO

> **NEO YOLO LLC 5087 Junction Road** Lockport, NY 14094

**EQUIPMENT LOCATION:** 

44090 County Road 28H; Woodland, CA

#### TO OPERATE

PROCESS DESCRIPTION: Negative pressure landfill gas collection system that collects landfill gas from the conventional and non-conventional portions

of the landfill

EQUIPMENT INVENTORY: Landfill gas collection system, including: methane gas collection wells not to exceed 350 vertical and horizontal wells serving the conventional portions of the landfill; condensate traps; one (1) collection system blower (rated at 1,897 SCFM); and associated piping and valves.

- Total Billing: Schedule 8, Misc. -

## **CONTROL EQUIPMENT INVENTORY:**

One (1) 54.6 MMBtu/hr landfill gas fired LFG Specialties enclosed flare, Model F-2000, with a one (1) second residence time (shared with PTO P-15-05)

#### **PERMITTED EMISSION LIMITS:**

Pollutant	Daily [lb]	Qtr #1 (Jan 1-Mar 31) [Ib]	Qtr #2 (Apr 1-June 30) [lb]	Qtr #3 (July 1-Sept 30) [[b]	Qtr #4 (Oct 1-Dec 31) [lb]	Yearly [tons]
VOC	14.9	1,344	1,359	1,374	1,374	2.73
CO	484.8	43,636	44,121	44,606	44,606	88.48
NO <sub>x</sub>	78.6	7,076	7,155	7,233	7,233	14.35
SO <sub>x</sub>	78.4	7,058	7,136	7,215	7,215	14.31
PM <sub>10</sub>	6.3	566	572	579	579	1.15

#### **PERMITTED PROCESS LIMITS:**

	Daily	<b>Qtr #1</b> (Jan 1-Mar 31)	Qtr #2 (Apr 1-June 30)	Qtr #3 (July 1-Sept 30)	Qtr #4 (Oct 1-Dec 31)	Yearly
Total Amount of Landfill Gas Gathered by the Collection System [million standard cubic feet]	2.732	245.9	248.6	251.3	251.3	997.1
Landfill Gas Combusted in the Flare [million British Thermal Units]	1,310.4	117,936	119,246	120,557	120,557	478,296

The following information is included to inform and assist the Permit Holder in achieving compliance with applicable provisions of Federal, State, and District Rules and Regulations. The following set of referenced regulations are not intended to be either comprehensive or exclusive, nor are they intended to be emission limiting permit conditions, but they are still applicable rules of the District. Occasionally laws are amended. The amended versions of the referenced rules shall be deemed to be in effect. It is the Permit Holder's responsibility to comply with all applicable Rules and Regulations.

1. The Permit Holder shall firmly affix this permit to operate, an approved facsimile, or other approved identification bearing the permit number upon the facility, article, machine, equipment, or other contrivance in such a manner as to be clearly visible and accessible. In the event that the facility, article, machine, equipment, or other contrivance is so constructed or operated that the permit to operate cannot be so placed, the permit to operate shall be mounted so as to be clearly visible in an accessible place within 25 feet of the facility, article, machine, equipment, or other contrivance, or maintained readily available at all times on the operating premises. [District Rule 3.1, §408]

- 2. The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property. [District Rule 2.5]
- Commencing work or operation under this permit shall be deemed acceptance of all of the conditions so specified. [District Rule 3.1, §402]
- 4. The Permit Holder shall notify the District of any occurrence which constitutes an upset/breakdown condition as soon as reasonably possible. Verbal notification shall occur no later than one hour after the detection of an upset/breakdown condition. The verbal notification shall be followed by a written notification to the Air Pollution Control Officer no later than four hours after the detection of an upset/breakdown condition. If the upset/breakdown occurs when the District cannot be contacted, the report of breakdown shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved, and to the extent known the cause(s) of the occurrence. [District Rule 5.2, §301.1 and §301.2]
- 5. The Permit Holder shall submit an annual throughput/production report at the end of each calendar year. This report is due no later than March 31 for the previous year. This report must include actual operating hours and actual amounts of materials processed (for materials that have process limits listed on the Permit to Operate). Each type of material and each type of process must be listed separately. [District Rule 3.1, §405.1]
- 6. This permit shall not be transferable, by operation of law or otherwise, from one location to another or from one piece of equipment to another. It shall be the transferee's responsibility to inform the District on assumption of ownership or operating control of any item under a permit from the District and for which a permit to operate will be required. For any such transfer as hereinabove described, said transferee shall submit an application for authorization in accordance with applicable District Rules. [District Rule 3.1, §304]
- 7. Modifications to this permit, as defined by District Rules and Regulations, requires prior District approval. A modification is defined as any physical change, change in method of operation, addition to or any change in hours of operation, or change in production rate, which: would necessitate a change in permit conditions; or is not specifically limited by a permit condition; or results in an increase in emissions not subject to an emissions limitation. [District Rule 3.4, §223]
- 8. This permit to operate shall be renewable annually on the permit's anniversary date, commencing one year after the date of issuance. The Permit Holder shall pay a fee for the annual permit renewal. If the annual renewal fee is not paid by the specified due date, the District shall assess a penalty of not more than 50% of the fee due. Non-payment of renewal fees is grounds for permit cancellation. [District Rule 3.1, §305 and District Rule 4.1, §303 and §401]

The following set of conditions are established by the District to provide enforceable operating parameters as authorized by California Health and Safety Code Section 42301 and District Rule 3.1, Section 402. If any of the rules and regulations referenced below are amended subsequent to the issuance date of this permit, resulting in the amended rule differing from or superseding the corresponding condition, then the Permit Holder shall be required to comply with the amended rule or regulation and shall no longer be required to comply with the superseded condition.

- 9. The combined VOC emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 114.6 lb per day, 10,325 lb/1<sup>st</sup> calendar quarter, 10,440 lb/2<sup>nd</sup> calendar quarter, 10,554 lb/3<sup>rd</sup> calendar quarter, 10,554 lb/4<sup>th</sup> calendar quarter, and 20.94 tons per year. [District Rule 3.4]
- 10. The combined CO emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 844.2 lb per day, 75,980 lb/1<sup>st</sup> calendar quarter, 76,825 lb/2<sup>nd</sup> calendar quarter, 77,669 lb/3<sup>rd</sup> calendar quarter, 77,669 lb/4<sup>th</sup> calendar quarter, and 154.07 tons per year. [District Rule 3.4]
- 11. The combined NO<sub>x</sub> emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 234.5 lb per day, 21,106 lb/1<sup>st</sup> calendar quarter, 21,341 lb/2<sup>nd</sup> calendar quarter, 21,575 lb/3<sup>rd</sup> calendar quarter, 21,575 lb/4<sup>th</sup> calendar quarter, and 42.80 tons per year. [District Rule 3.4]
- 12. The combined  $SO_x$  emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 126.0 lb per day, 11,346 lb/1<sup>st</sup> calendar quarter, 11,472 lb/2<sup>nd</sup> calendar quarter, 11,598 lb/3<sup>rd</sup> calendar quarter, 11,598 lb/4<sup>th</sup> calendar quarter, and 23.01 tons per year. [District Rule 3.4]
- 13. The combined PM<sub>10</sub> emissions from all landfill gas combustion equipment being served by this collection system shall not exceed 100.0 lb per day, 9,011 lb/1<sup>st</sup> calendar quarter, 9,111 lb/2<sup>nd</sup> calendar quarter, 9,211 lb/3<sup>rd</sup> calendar quarter, 9,211 lb/4<sup>th</sup> calendar quarter, and 18.27 tons per year. [District Rule 3.4]
- 14. The combined landfill gas usage for all combustion equipment being served by this collection system shall not exceed 2.732 million standard cubic feet per day, 245.9 million cubic feet /1st calendar quarter, 248.6 million cubic feet /2nd calendar quarter, 251.3 million cubic feet /3rd calendar quarter, 251.3 million cubic feet /4th calendar quarter, and 997.1 million cubic feet per year. [District Rule 3.4]
- 15. The Permit Holder shall not discharge into the atmosphere from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
  - a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
  - b. Greater than 20% opacity. [District Rule 3.4]
- 16. The Permit Holder shall operate the enclosed flare with a minimum combustion zone residence time of 1 second, and shall equip the flare with automatic temperature controls designed to control the average minimum temperature at or above a minimum temperature of 1400 °F. The enclosed flare shall also be equipped with an automatic shutoff gas valve and an automatic re-start system. [District Rule 3.4]

- Only landfill gas shall be burned in the flare. No supplemental fuel may be burned in the flare, excluding pilot gas. [District Rule 3.4]
- 18. The number and types of components used by the operation shall match the equipment listed in the EQUIPMENT INVENTORY section of the permit. The Permit Holder shall maintain a complete list of all associated gas collection equipment serving the conventional portions of the landfill, which includes a description of each system component. Any wells, piping, or valves installed in the non-conventional portions of the landfill are not covered under this permit. This list shall be kept onsite and shall be made available to the District upon request. [District Rule 3.4]
- 19. All landfill gas gathered by this gas collection system shall be collected using only an approved blower with a maximum rating of 1,897 SCFM. [District Rule 3.4]
- 20. A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in standard cubic feet) of landfill gas collected and delivered to the site by system's collection blower. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4]
- 21. A non-resettable, totalizing gaseous fuel flow meter shall be installed and utilized to measure the quantity (in standard cubic feet) of landfill gas combusted in the flare. The meter shall be accurate to plus or minus five percent and shall be calibrated at least once every twelve (12) months. [District Rule 3.4]
- 22. The Permit Holder shall install and maintain such facilities on the flare stack as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with Air Resources Board Test Method 1. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.4]
- 23. The particulate matter (as PM<sub>10</sub>) emission concentration for the enclosed flare shall not exceed 0.0035 gr/dscf at standard conditions. [District Rule 3.4]
- 24. The hydrogen sulfide (H<sub>2</sub>S) content of the landfill gas combusted in the enclosed flare shall not exceed 162 ppmv. [District Rule 3.4]
- 25. The Permit Holder shall analyze the fuel's higher heating value (wet basis) and sulfur content (as H<sub>2</sub>S) at least once every twelve (12) consecutive month period. [District Rule 3.4]
- 26. The emission concentrations for the flare shall not exceed the following:
  - a. VOC (measured as hexane): 0.0114 lb/MMBTU;
  - b. CO: 0.370 lb/MMBTU; and
  - c. NO<sub>X</sub> (as NO<sub>2</sub>): 0.060 lb/MMBTU. [District Rule 3.4]
- 27. The Permit Holder shall perform a source test at least once every twelve (12) months in order to demonstrate compliance with the VOC, CO, and NO<sub>X</sub> emission limits. [District Rule 3.4]

- 28. Source testing shall be conducted using the following test methods:
  - a. VOC EPA Method 18, or other District approved methods:
  - b. CO EPA Method 10 or CARB Method 100;
  - c. NO<sub>x</sub> (as NO<sub>2</sub>) EPA Method 7E or CARB Method 100; and
  - d. Stack gas oxygen EPA Method 3A or CARB Method 100. [District Rule 3.4]
- 29. The District must be notified prior to any emissions testing event and a protocol must be submitted for approval thirty (30) days prior to testing. The results of an emissions testing event shall be submitted to the District within sixty (60) days of the test date. The protocol and report shall be mailed to the attention of the Supervising Air Quality Engineer. [District Rule 3.4]
- 30. The Permit Holder shall maintain a written log of all maintenance work performed that requires the shutdown of the gas collection system. The log shall include a description of work, the date work was performed, and the amount of time needed to complete the maintenance work. Emissions of landfill gas to the atmosphere shall be minimized during each shutdown. [District Rule 3.4]
- 31. The Permit Holder shall operate the gas collection system in a manner which maximizes the amount of landfill gas extracted from the landfill, while preventing overdraw that can cause a fire or the damage of the gas collection system. [District Rule 3.4]
- 32. Except for active disposal areas, or areas undergoing maintenance or repair, or areas not served by the gas collection system, the Permit Holder shall operate the gas collection system in such a manner that the surface emissions testing of the landfill demonstrates the concentrations of total organic compounds (measured as methane) do not exceed 500 ppmv at any point on the surface of the solid waste disposal site or along the gas transfer path of the gas collection system. [District Rule 3.4]
- 33. The Permit Holder shall comply with all applicable standards, criteria and requirements of Section 60.752(b) of 40 CFR Part 60, Subpart WWW, Standards of Performance fo Municipal Solid Waste Landfills, upon determination by the District that the Yolo County Central Landfill's uncontrolled non-methane organic compounds (NMOC) emission rate exceeds 50 megagrams per year. [District Rule 3.4]
- 34. The Permit Holder shall monitor and record on a daily basis the following quantities of landfill gas:
  - a. Measured amount of landfill gas collected by the system's collection blower (in standard cubic feet);
  - b. Measured amount of landfill gas combusted in the flare (in standard cubic feet); and
  - c. Calculated amount of landfill gas combusted in the flare (in British thermal units). [District Rule 3.4]

- 35. The Permit Holder shall calculate and record the actual combined quarterly and annual VOC, CO, NO<sub>X</sub>, SO<sub>X</sub> (converted from the inlet H<sub>2</sub>S concentration using mass balance), and PM<sub>10</sub> emissions from all landfill gas combustion equipment served by this collection system. The calculations shall use each emissions unit's actual fuel usage and either:
  - a. For pollutants with on-going source testing requirements, the emission factors from the most recent source test submitted to, and approved in writing by, the District; or
  - b. For pollutants without on-going testing requirements, the established emission factor for the emissions unit used in the most recent emission evaluation. [District Rule 3.4]
- 36. The Permit Holder shall maintain all records on site for a period of five (5) years from the date of entry and these records shall be made readily available to District personnel upon request. [District Rule 3.8, §302.6(b)]

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health & Safety Codes of the State of California or the Rules and Regulations of the Yolo-Solano Air Quality Management District.

Mat Ehrhardt, P.E.

AIR POLICYTION CONTROL OFFICER

By:

Date of Issuance: December 10, 2010

ANNIVERSARY DATE: July 13

#### **Rene Toledo**

From:

Scott Overhoff [soverhoff@fortistar.com]

Sent:

Friday, December 03, 2010 5:53 AM

To: Cc: Rene Toledo 'Supama Chakladar'

Subject:

Information Request - ATC C-09-92 (NEO Yolo)

Attachments:

FINAL\_MM&NEO Combined\_CY2010\_Compliance Table\_SAM.pdf; NEO Yolo Maintenance Records.pdf

Follow Up Flag: Flag Status:

Follow up Flagged

### Rene,

Here is the information that you requested. The compliance table was prepared for the SAM report just prior to the inspection and Norman actually had a printed copy on-site for you. Here is a pdf. copy of that table, as well as the Maintenance Records you requested.

Thanks and have a good day.

Scott Overhoff
Environmental Manager
FORTISTAR METHANE GROUP
5087 Junction Road
Lockport, New York 14094
Phone: (716) 439-1004 ext. 118

Fax: (716) 439-1000

email: : soverhoff@fortistar.com

## MM & NEO Yolo Operations Data Calendar Year 2010

<u>INS'</u>	TRU	CT	ON	IS:

- After opening this file, "save as" the document to reflect current reporting period.
- 2) Modify the dates below to reflect current reporting period.

Current Year:	Calendar Year 2010
Ourrent real.	Calefluar rear 2010

3) Modify the year for the Months in the boxes below.

Months in First Quarter	January 2010
of Current Year:	February 2010
Ė	March 2010
Months in Second Quarter	A=210040
	April 2010
of Current Year:	May 2010
	June 2010
Months in Third Quarter	July 2010
of Current Year:	August 2010
	September 2010
Months in Forth Quarter	October 2010
of Current Year:	
Of Current rear:	Novemebr 2010
	December 2010

- 4) For the flare, download a "Detailed Production Report" from the FMG Production Database to your computer for the time period for which data is to be entered and then do the following:

  a) Delete all columns B, C, D, and E. Cells will then shift left.

  b) After cells shift left, delete Columns C through AY. Cells will shift left.

  c) For each month (one at a time), highlight and "copy" the data for columns B through G.

  d) Select this tab in this file, and "Paste Special Values" into the proper month.

  - e) Check to make sure data is present for each day.
- 5) For the engine data, open each individual monthly recordkeeping data table and copy and paste special "values" the individual engine daily flow readings into each engine's column below.
- 6) Fill in appropriate Source Test Data on "Enter Source Test Data" tab of this file.
- 7) Everything else is automatic. Check each daily, quarterly, and annual tables for highlighted exceedances.

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45 Bee 16	D* -W			Langua I				4-46			
1-Jan-10	50	0	0	0	0	0	305	350	0	261	
2-Jan-10	50	0	0	0	0	0	268	307	- 6		31
3-Jan-10	50	0	44	0	Ö	0	299	339		2.60	28
4-Jan-10	51	0	48	0	0	Ö	310	351	0		30
5-Jan-10	51	0	0	0	0		282	319		2001	27
6-Jan-10	51	0	0	0	0		325	363	0		
7-Jan-10	51,	0	0	Ö	Ō		314	347	0		32
8-Jan-10	51	0	0	0	0		227	254	0	- 0	31
9-Jan-10	51	0	0	0	0		318	355	- 0	0	22
10-Jan-10	53	0	43	0	0		295	332	0	- 0	31
11-Jan-10	52	0	44	0	0	0	306	342	0	0	29
12-Jan-10	52	0	0	0	0	0	318	355	0	0	30
13-Jan-10	51	0	0	0	0	0	246	278	0	0	
14-Jan-10	51	0	0	0	0	0	368	405	0	0	24
15-Jan-10	52	0	0	0	0	0	220	236	0	- 6	35
16-Jan-10	51	0	0	0	0	0	278	365	0	0	20
17-Jan-10	54	0	49	0	Ö	0	188	269	- 0		32
18-Jan-10	52	0	49	0	0	Ö	221	307	- 0	0	23
19-Jan-10	52	0	Ö	0	0	0	209	309	0		26
20-Jan-10	51	0	0	0	0	0	212	311	0	0	25
21-Jan-10	51	0	0	0	0	0	236	342	0	189	25
2-Jan-10	51	0	0	0	0	Ö	219	317	- 0	275	7
3-Jan-10	51	0	0	0	0	0	311	459			
4-Jan-10	52	0	47	0	0	0	177	242	- 0	395 229	
5-Jan-10	52	0	47	0	0	0	177	242	- 0	230	
6-Jan-10	51	0	0	0	0	0	217	282		300	
7-Jan-10	53.2	0	0	0	0	Ö	204	C	0	258	7;
8-Jan-10	51	859	1550	231.88	14	450160	88	č	- 0	49	25
9-Jan-10	51	501	1550	387.73	24	752733	0	öl	0	357	154
0-Jan-10	52.5	441.7	1550	337.31	23	636143	0	ő	0	403	
1-Jan-10	52.2	522	1550	396.86	24	752733	ő	0	0	396	
-Feb-10	52.1	549	1553	416.63	24	791760	0	0	01		
-Feb-10	54.8	712	1550	434,77	24	785520	- 0	0		419	
-Feb-10	53	550	1550	470.26	24	878504	0	0	0	423	
-Feb-10	54.7	369	1550	294.11	22	532355	0	- 0	0	0	
Feb-10	51	599	1550	444.61	24	863156	0	0	0	642	
Feb-10	51	599	1550	444.61	24	863156	- 0	0	<del></del>	432	
Feb-10	54.4	516	1553	408.46	23	743418		0	<del>  </del>	514 390	

0 Feb 45		8461	4,550	1 77	el e	01 344044	0		1	<u> </u>	· · · · · · · · · · · · · · · · · · ·
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10-Feb-10	53.1	573	45	92.2		5 171977				0 33	
11-Feb-10	56.8	0	0		_	0 0				0 32	32
12-Feb-10	56	0	0			0 0 0 0	0			0 34	
13-Feb-10 14-Feb-10	55 55	- 0	0 47			0 0				0 350	
15-Feb-10	55.5	ő	0			ol o				0 323	
16-Feb-10	55	. 0	0			0 0				0 27	34
17-Feb-10	59.2	0	42		-	0 0				333	
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20-Feb-10	55	öl	ő			0 0				359	
21-Feb-10	56	0	50	(		0 0				388	35
22-Feb-10	54.2	0	0	· ·		0 0				342	
23-Feb-10 24-Feb-10	56 54.6	680	0 1550	75.31		0 0 3 136559	220	385		372	
25-Feb-10	52.4	680	1550	83.44		5 157660	190			307	
26-Feb-10	52.6	0	0	(		0 0	88	306		388	359
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3-Mar-10	56	0	0	C		0	0	398	(	375	350
4-Mar-10	56	0	0	100.00		0 0	0				
5-Mar-10 6-Mar-10	55 54	550 0	1550	123.86		7 222970	172 316	213 352			186
5-Mar-10 7-Mar-10	56.2	0	0	- 0			261	298	- 6		
8-Mar-10	56.4	0	49.5	C		0	254	309	C	280	272
9-Mar-10	55.7	0	0	0		0	255	319	C		
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12-Mar-10	52		0	0		ő ő	310	333			354
13-Mar-10	54	0	0			0	129	377	0	355	405
14-Mar-10	54.3	0	47	. 0		0	215	230	0		
15-Mar-10 16-Mar-10	54.3 53.5	0	0	0		0 0	333 253	359 277	0		385 297
7-Mar-10	52.4	<del>- 6</del>	ő	ő		0	301	341	ŏ		369
8-Mar-10	52.4	-10	49	0		0	79	305	0		312
9-Mar-10	52	0	0	0		0	115	316	0		
20-Mar-10 21-Mar-10	51 53.2	0	0	0			205 257	370 287	0		403 269
2-Mar-10	52.3	0	- 6	<u>ö</u>			267	304	0		336
3-Mar-10	52.5	0	0	0			289	313	0	290	265
4-Mar-10	52	0	0	. 0			295	326	0		297
5-Mar-10 6-Mar-10	52 51	0	0	0			303 269	319 277	0		65
7-Mar-10	51	0	0	Ö			317	337			0
8-Mar-10	56	Ö	63	0	C	0	257	283	0	274	34
9-Mar-10	55.7	0	0	0			290	321	0		0
0-Mar-10 1-Mar-10	55 55	0	0	0			242 305	281 304	0		226 346
-Apr-10	55	0	0	0			292	313	0		327
-Apr-10	54	0	0	0			297	321	0	296	340
-Apr-10	55.6	0	0	0			307	330	0	306	344
-Apr-10 -Apr-10	55.6 53	0	0	0			315 243	341 264	0	315 244	358 275
-Apr-10 -Apr-10	50	0	<del> </del>	0	0		299	329	Ö	297	342
-Apr-10	50	0	0	0	0	0	299	342	0	310	360
-Apr-10	50	0	0	0			303	356	0	316	372
Apr-10	50 51	0	0	0	0	0	291 260	345 351	0	307 309	363
0-Apr-10 1-Apr-10	50.7	0	0	0	0	- 6	339	383	0	342	280
2-Apr-10	50	0	0	. 0	0	0	305	333	. 0	312	367
3-Apr-10	50	0	0	0	0		279	346	0	286	341
4-Apr-10	50.4 50	0	0	0	0		315 325	360 365	0	332 341	384
5-Apr-10 5-Apr-10	51	0	0	0	0		311	352	0	341	387 375
7-Apr-10	51.2	0	0	0	0	0	332	387	0	352	413
3-Apr-10	51.3	0	0	0	. 0		233	362	0	304	387
3-Apr-10	51.4	0	0	0	0		411 235	382 335	0	324	417
)-Apr-10  -Apr-10	50.8 50.5	- 0	0	- 0	0		264	365	0	299 305	366 363
2-Apr-10	50	0	0	0	0	0	300	389	0	346	414
3-Apr-10	50	0	78	0	0		287	377	0	326	403
I-Apr-10	50.3	0	0	0	0		298 256	398 341	0	339	421
-Apr-10 -Apr-10	50.1 50	0	0	- 0	0		269	357	0	290 304	366 378
'-Apr-10	49.2	0	0	0	0	0	271	356	0	307	383
-Apr-10	49	0	0	0	0	0	286	377	0	327	404
-Apr-10	51	0	0	0	0	0	271	341	0	305	368
-Apr-10	51.3	0	0	0	0		304 284	364 338	0	340 299	385 360
May-10 May-10	52.6	0	0	0	0	0	345	333	0	282	358
		ő	ő	Ö	0	0	172	309	ő	297	301
May-10	50										
	50.5 52	0	0	0	0	0 0	217 258	325 327	0	232 284	369 340

# All Combustion Devices - Quarterly & Annual Compliance Tables To Be Used For SAM and ACC Reports

## = Value Deviates from Permit Limit

	Quarter #1 (January - March) Compliance Status									
Home t	LFG Consumption (MMsct/month) (245.9 MMsc/quarter Limit)	NOx (ib/month) (21,108 tt/quarter Limit)	(lb/month) (75,980 lb/quarter Limit)	VOC's (lb/month) (10,325 ib/quarter Limit)	SOx (lb/month) (11,346 b/quarter Limit)	PM (lb/month) (9,011 b/quarter Limit)				
January 2010	28.68	2,499.73	7,485.39	392.01	The state of the s					
February 2010	31,26	2,474.11	7,524.55		624.59	929.01				
March 2010	33.86			293.57	680.79	796.67				
Iviarch 2010		3,177.32	9,984.91	474.07	737.33	1,161.27				
Quarrenty Total 25	93.80	8,151.16	24,994.85	1,159.65	2.042.72	2,886.96				
	MMscf	Pounds	Pounds	Pounds	Pounds	2,000.90 Pounds				

Month		(thinsents) 2. (26,941 bigunter (nut)	S TOMBORD		tement (600 pa vy te de (floritorente) (1) (1),422 forgagene (1)	Control of the contro				
April 2010	39.81	3,721.86	11,963.73	578.88	866.91					
May 2010	38.41	3,582.08	11,508.43	566.83	836.40	1,368.17				
June 2010	36.12	3,364.35	10,687,05	540.63	786.46	1,323.57				
	114.33	10,668.28	34,159.21	1,686,34		1,254.47				
Quarterly Total 💯	MMscf	Pounds	Pounds	Pounds	<b>2,489.76</b> Pounds	3,946.21 Pounds				

Marth	LFG Consumption :			A Control of the Cont	17 800 22 W	(Brittonia)
July 2010	37.44	3,464.10	11,100,19	579.01	815.25	4 004 00
August 2010	38.08	3,541.27	11,274,25	575,16	829,30	1,301.89
September 2010	34.42	3,207.43	10,253.61	515.67	749.64	1,323.25
Carried Ell	109.94 MMscf	10,212.81 Pounds	<b>32,628.04</b> Pounds	1,669.84 Pounds	2,394.19 Pounds	1,190.40 3,815.55 Pounds

	And Content of the Co					- 62.5
October 2010	0.00	0.00	0.00	0.00	0.00	0.00
Novemebr 2010	0.00	0.00	0.00	0.00	0.00	0.00
December 2010	0.00	0.00	0.00	0.00		0.00
	0.00	0.00	0.00		0.00	0.00
	MMscf	Pounds	Pounds	0.00 Pounds	0.00 Pounds	0.00 Pounds

1200 1 1 2 2 10 10 10 10	Annual Compliance Status							
College 100 F	LFG Consumption (MMscf/year) (997 1 MMscf/annual Limit)	NOx (lb/year) (85,600 lb/annual Limit)	(lb/year) (308,140 lb/annual Limit)	VOC's (lb/year) (41,880 lb/annual Limit)	SOx (ib/year) (46,020 ib/annual Limit)	PM (lb/year) (36,540 b/annual Limit)		
AND TOTAL STATE	318.08	29,032.25	91,782.10	4,515.83	6,926.67	10,648.72		
	MMscf	Pounds	Pounds	Pounds	Pounds	Pounds		

# Flare - Quarterly & Annual Compliance Tables To Be Used For SAM and ACC Reports

= Value Deviates from Permit Limit

Month	Quarter #1 (January - March) Compliance Status								
	LFG Consumption (MMft <sup>3</sup> /month) (202 1 MMft <sup>3</sup> /quarter Limit)	NOx (lb/month) (7.076 ib/quarter Limit)	(tb/month) (43,636 b/quarter Limit)	VOC's (lb/month) (1.344 (b)quarter Limit)	SOx (lb/month) (231 lb/quarter t-milt)	PM (ib/month) (506 blouster Limit			
January 2010	2.59	63.63	2.03	0.35	56.44	6.50			
February 2010	7.54	191.00	6.10	1.06	164.14	19.50			
March 2010	0.22	5.82	0.19	0.03	4.86	0.59			
Quarterly Total	10.35 MMR <sup>3</sup>	260.45 Pounds	8.31 Pounds	1.44 Pounds	225,44 Thurs	<b>26.59</b> Pounds			

Month	Quarter #2 (April - June) Compliance Status								
	LFG Consumption (MMBtu/month) (119,248 MMBtu/quarier Limit)	NOx (lb/month) (7,155 8/quarter Limit)	(lb/month) (44,121 lb/quarter Limit)	VOC's (lb/month) (1,359 b/quarter Limit)	SOx (lb/month) (7.136 lb/quarter Limit)	PM (lb/month) (672 lb/quiner Limit)			
April 2010	0.00	0.00	0.00	0.00	0.00	0.00			
May 2010	0.00	0.00	0.00	0.00	0.00	0.00			
June 2010	0.00	0.00	0.00	0.00	0.00	0.00			
Quarterly Total	0.00	0.00	0.00	0.00	0.00	0.00			
Generally relies	MMBtu	Pounds	Pounds	Pounds	Pounds	Pounds			

Month	Quarter #3 (July - September) Compliance Status								
	LFG Consumption (MMStu/month) (120,557 MMBhu/quarter Limit)	NOx (lb/month) (7,233 lb/querter Limit)	(lb/month) (44,806 lb/quarter Lurit)	VOC's (lb/month) (1,374 lb/quarter Limit)	SOx (lb/month) (7.215 Biguarter Limit)	PM (lb/month) (579 lb/quarter Limit)			
July 2010	0.00	0.00	0.00	0.00	0.00	0.00			
August 2010	0.00	0.00	0.00	0.00	0.00	0.00			
September 2010	0.00	0.00	0.00	0.00	0.00	0.00			
Guarterly Total	0.00 MMft <sup>3</sup>	0.00 Pounds	0.00 Pounds	0.00 Pounds	0.00 Pounds	0.00 Pounds			

Month	Quarter #4 (October - December) Compliance Status								
	LFG Consumption (MMBtu/month) (120,657 MMBtu/quarter Limit)	NOx (lb/month) (7.253 biquarter Limit)	(lb/month) (44,896 lb/quarter Limit)	VOC's (fb/month) (1,374 to/querter Limit)	SOx (lb/month) (7,215 fb/quarter Limit)	PM (lb/month) (679 lb/quarter Limit)			
October 2010	0.00	0.00	0.00	0.00	0.00	0.00			
Novemebr 2010	0.00	0.00	0.00	0.00	0.00	0.00			
December 2010	0.00	0.00	0.00	0.00	0.00	0.00			
Quarterly Total	0.00 MMft <sup>3</sup>	0.00 Pounds	0.00 Pounds	0.00 Pounds	0.00 Pounds	0.00 Pounds			

Calendar Year	Annual Compliance Status							
	LFG Consumption (MMBtu/year) (478,296 MMBtu/quarter Limit)	NOx (lb/year) (28,700 lb/annual Limit)	(Ib/year) (176,960 ib/armual Limit)	VOC's (lb/year) (5,460 b/annual Limit)	SOx (Ib/year) (28,620 lb/annual Limit)	(lb/year) (2,300 lb/annual Limit)		
Total	5,541 MMBtu	260 Pounds	8 Pounds	1 Pounds	225 Pounds	27 Pounds		

NOTE: After 2010, the First quarter LFG Consumption Units must be changed as well as the Annual Total formula due to the new permit effective date.

## **FORTISTAR Methane Group**

NEO Yolo LLC

44090 Road 28H, Box #3 ◆ Woodland, California 95776 Tel. (530) 753-9109 ◆ Fax. (530) 753-6581

January 14, 2011

Mr. Rene Toledo Yolo Solano AQMD 1947 Galileo Ct. Suite 103 Davis, CA 95616

Subject:

NEO Yolo LLC - Request for Issuance of Title V Permit #F-01348-1

Dear Mr. Toldeo:

Please accept this letter as a request that the YSAQMD issue the proposed Title V permit (#F-01348-1), given that ATC C-09-91 was implemented into PTO P-26-98(a1) on December 10, 2010. If you have any questions or require any additional information regarding this letter, please contact Suparna Chakladar at (951) 833-4153.

Sincerely,

Anthony J. Falbo

Vice President and General Manager

FORTISTAR Methane Group

NEO Yolo LLC

cc: Suparna Chakladar, FMG